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II.

**PHENOLOGICAL DATES AND METEOROLOGICAL DATA RECORDED BY THOMAS MIKESELL  
AT WAUSEON, FULTON COUNTY, OHIO.**

Compiled and edited by J. WARREN SMITH.



## II. PHENOLOGICAL DATES AND METEOROLOGICAL DATA RECORDED BY THOMAS MIKESELL BETWEEN 1873 AND 1912 AT WAUSEON, OHIO.

By J. WARREN SMITH, Professor of Meteorology.

[Dated: Columbus, Ohio, Sept. 30, 1914.]

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### INTRODUCTION.

#### PHENOLOGICAL OBSERVATIONS.

By CHARLES FITZHUGH TALMAN, Professor of Meteorology.

Phenological observations have generally been neglected in the United States. The one great exception to this statement is the voluminous series of reports collected by the late Prof. Franklin B. Hough, viz, (1) a series of observations made in New York State, covering the years 1850–1863, which were published by the New York Regents, and (2) a series covering the country at large, for the years 1851–1859, which were collected under the auspices of the Patent Office and the Smithsonian Institution, and published by the Patent Office. Since Hough's time only desultory attempts have been made to establish any extensive system of collecting phenological observations in the United States. Some suggestions on this subject, together with a list of plants especially adapted for observation in this country, were published by Prof. L. H. Bailey in the *Monthly Weather Review*, September, 1896, 24: 328–331. A valuable contribution to the science of phenology was Cleveland Abbe's First Report on the Relation between Climates and Crops (*Weather Bureau Bulletin* 36), published in 1905, which deals chiefly with the philosophical aspects of the subject, such as the question of "thermal constants," etc., the extensive collection of ordinary field observations of periodic phenomena which accompanied the original report have not yet been published. Quite recently the Bureau of Statistics of the United States

Department of Agriculture began publishing a series of bulletins on the dates of planting and harvesting various crops in the United States, but only one of these has yet been issued.<sup>1</sup>

In the Old World phenological observations are collected systematically in several countries, and have already made possible the production of some very interesting and instructive phenological charts. The leading phenological organization is the one directed by Prof. E. Ihne, of Darmstadt, Germany, which now embraces a corps of 126 observers in Germany and Austria-Hungary, besides one each in England, Russia and Spain, whose observations are published annually in a work entitled "*Phænologische Mitteilungen*," now in its thirty-first year. This work also contains an annual bibliography of current phenological literature, besides some memoirs on phenological subjects.

There is also a large corps of phenological observers in the British Isles connected with the Royal Meteorological Society, and their observations are the subject of a report published annually in the quarterly journal of that society. The last report showed a total of 124 observers. In Holland there is a corps of 19 phenological observers; Bohemia has 58. Observations are also made regularly at a number of stations in Finland, and there is a corps of observers in Nova Scotia. A particularly

<sup>1</sup> Covert, J. R. *Seedtime and harvest: Cereals, flax, cotton, and tobacco*. Washington, 1912. (U. S. Bureau of Statistics, *Bulletin* 85.)

valuable series has been maintained for many years by the Royal Observatory of Belgium, at Uccle near Brussels. Very elaborate phenological observations were maintained in Belgium under the direction of Quetelet, who drew up the first set of phenological instructions and gave definite form to the science of phenology, which had been founded by Linnaeus in the middle of the eighteenth century. So far as cultivated plants are concerned, probably the most elaborate system of phenological observations in the world is that now maintained by the Meteorological Bureau of the Russian Ministry of Agriculture, under Prof. Brounov. This service has stations all over Russia, at which observations of the growth of cultivated plants are made in conjunction with meteorological observations, from instruments installed in the fields, as close as possible to the plants in question.

The dearth of such observations within the confines of the United States, and the length and completeness of Mr. Mikesell's observations at Wauseon, Ohio, make them of unusual interest and value.

#### THOMAS MIKESELL.

The observer, Thomas Mikesell, was born on the farm 1 mile north of where Wauseon, Ohio, now stands in Fulton County but then Lucas County. His parents, William and Margaret (Boyes) Mikesell, came from western Pennsylvania in April, 1837, and settled in the forest.

He attended country schools until 14 years of age and then went to the high school at Wauseon, 1 mile distant. At that time the Wauseon High School had but two rooms. In June, 1863, he enlisted in Company H, Eighty-sixth Ohio Volunteer Infantry and served with it until February 10, 1864. After leaving the Army Mr. Mikesell resumed his high-school course and in 1866 his school days ended; not so his study of nature.

For several winters Mikesell taught elementary school in Ohio, Iowa, and northern Missouri; then he returned to Wauseon in the fall of 1869. From this time on he worked on the farm, retiring from active life in the spring of 1902. In November, 1873, he married Miss Martha Herriman, but no children have come to this union.

In 1889 he was elected secretary of the Fulton County Fair and for 16 consecutive years he continued to serve in that capacity. In 1902 he was appointed a corn and wheat region observer by the United States Weather Bureau and that same year, because of failing health, he was obliged to give up his farm and move to Wauseon, where he still resides.

*Meteorological observations.*—In 1865 Mr. Mikesell began to be particularly interested in the weather and at that time he began to study Brocklesby's Meteorology. A little later, in 1868, he secured a copy of Loomis' Treatise on Meteorology and immediately afterwards began himself to keep a journal or record of the weather conditions. After returning to Wauseon in the fall of 1869 he secured a few instruments and began systematic obser-

vations which he has maintained until the present time. There is scarcely an observation lost during all these 45 years.

He continued to read extensively in science and in history; in the early summer of 1870 he even decided to enlist in the weather service of the United States Signal Corps just starting under Gen. A. J. Myer, but finally he gave up that plan. In 1875 he began the study of birds, and since 1883 he has kept a very complete record of the migrations of a large number of birds. Beginning in 1884 he sent reports of bird migrations to the American Ornithologists' Union and later to the Division of Economic Ornithology of the United States Department of Agriculture. He was elected an associate member of the Ornithologists' Union in November, 1885.

When the Ohio Meteorological Bureau was organized in 1882 Mr. Mikesell became one of its first observers. In the annual report of that bureau for 1889 he published an article wherein, under the title "Notable Meteorological Events," he gave well-authenticated accounts of important weather conditions from the earliest settlement of Fulton County in 1834.

*Phenological observations.*—His phenological observations were begun in 1883 and have been continued most of the time since that year except when too much work caused neglect of some of the records. Mr. Mikesell states that he began to keep the records for his own satisfaction, but as the work continued he came to think that some day they might be of some use to others. He has expressed his pleasure in keeping these records with the feeling that thereby he has helped to increase knowledge of this world of ours.

The observations published in this present supplement are but a portion of the records that this one man has maintained during his busy life. They constitute one of the most complete and reliable local records of which we have knowledge, as to the development of plant life and the migrations of birds and animals. Quietly, carefully, conscientiously, this man has merely kept his eyes open to see and systematically recorded the movements of nature about him year after year. He has done what thousands of other men might have done, but which no other one has done. The writer believes that science owes a great debt to such a man, that all honor is due him, and that the name of Thomas Mikesell should be set high among the faithful students of nature in this country.

#### WAUSEON, OHIO.

Wauseon is located in central Fulton County in northwestern Ohio (lat.  $41^{\circ} 36' N.$ , long.  $84^{\circ} 07' W.$ ). Fulton County is included between parallels  $41^{\circ} 30'$  and  $41^{\circ} 41' N.$  and meridians  $83^{\circ} 55'$  and  $84^{\circ} 20' W.$ ; its area is about 15 by 25 miles or 375 square miles. Mr. Mikesell's house and farm from the beginning of observations until about 1901 were a mile north of Wauseon and 35 miles west of Toledo, Ohio. The place has an altitude of 225 feet above Lake Erie and about 800 feet above sea level.

The land slopes slightly toward the southeast; and his house stood at the southern edge of the second beach of the glacial Lake Erie.

The soil is of varying character. There are ridges of yellow sand, clay ridges, and level stretches of white clay; a black clay loam has a blue clay subsoil, and there is also sandy loam with clay beneath. There are a few gravel ridges and a little red clay in patches. Some hollows formerly held water until late in the summer; these are now drained and are found to contain more or less muck overlying clay or white sand or marl. All these varieties of soil are often found within a radius of 30 rods.

When first settled, the county was covered with a heavy growth of timber, mostly white oak, red oak, burr oak, swamp white oak, pin oak, and some chestnut oak; six species of hickory, black walnut, butternut, tulip tree (or poplar), buttonwood, white and black ash, sassafras, red and white elm, coffee tree, honey locust, sugar maple, red and white maple, and cottonwood. The smaller growth consisted mainly of prickly ash, wahoo, bladder nut, four species of sumac besides the poison ivy, several species of thorn, black haw, arrowwood, cranberry tree, the dogwoods, witch-hazel, ironwood, water beech, several species of willows, quaking aspen, and some others.

The wild fruits are elderberries, huckleberries (two species), black and red raspberries, blackberries, dewberries, black currants, three species of gooseberries, cherries, plums, crab apples, grapes, etc. Nearly all the cultivated fruits of this latitude are raised there.

In general the vegetables and grains of the whole Temperate Zone are cultivated here and nearly all do well. The minor vegetation is about the same as in all northern Ohio and includes a great many species.

Until 1901 the dates of farm operations and of the advance of vegetation were observed on Mr. Mikesell's own fields and farm. He then moved to the village of Wauseon and for the remainder of the period the records are from fields near his residence, the same field being observed throughout the entire season. The instruments used have been reliable and well exposed at all times.

#### OBSERVATIONS.

*Instruments.*—From the beginning of his observations until October 16, 1882, all temperature observations were made with a Taylor & Richardson thermometer (Rochester, N. Y.), which was not self-registering. Mr. Mikesell once tested its freezing point ( $32^{\circ}\text{F}.$ ) and found it correct.

Between October 16, 1882, and October 17, 1903, he employed standard dry-bulb and wet-bulb thermometers, also maximum and minimum thermometers, all made by J. & H. J. Green (Brooklyn, N. Y.), and furnished him by the Ohio Meteorological Bureau.

Since October 17, 1903, he has used the standard maximum and minimum thermometers furnished by the United States Weather Bureau to its cooperative observers; but has continued to also observe the dry- and wet-bulb thermometers made by Green.

The raingage used by Mikesell from the beginning of his observations until October 16, 1882, was made under his directions, by a tinner. The tube was 1 inch in diameter and the receiving funnel had an opening ten times the area of the cross section of the tube. This homemade gage he tested by comparing it with the official gage which was sent him in October, 1882, by the Ohio Meteorological Bureau, and found his old gage to be correct. The second gage was a standard gage with its funnel opening 8 inches in diameter and the inner tube 10 inches in length. About 1890 an official gage made by J. Schultzbach, of Washington, D. C., was sent him and put into use. The receiver of this gage was 8 inches in diameter and the overflow was 6 inches in diameter. This gage remained in use until November 2, 1902, when a standard 8-inch Weather Bureau gage was installed.

*Exposures.*—From November, 1869, to November, 1882, the thermometer was exposed in a homemade shelter whose design is best described in the sketch reproduced in figure 1. This shelter was kept turned so that the sun did not shine on the instrument. From November, 1869, to the spring of 1877 the shelter stood in the dooryard, about 30 feet southeast of the house and about  $5\frac{1}{2}$  feet above the nearly level sod beneath. There were some fruit trees 10 to 20 feet distant from the shelter, and these were kept trimmed to a height of 7 or 8 feet. In the spring of 1877 he moved the shelter to the north side of the house where the ground was open all about, and there the thermometers remained until November 1, 1882.

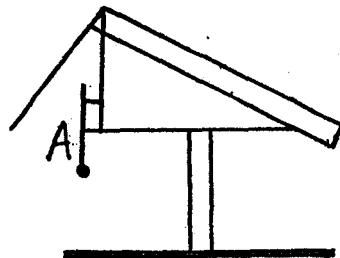


FIG. 1.—Sketch of the home-made thermometer shelter used by Mr. Mikesell from November 1869 to November 1882. Thermometer was at A.

A Stevenson screen was built by Mr. Mikesell in November, 1882, and he erected this new shelter at a point about 40 feet southeast of his house,  $5\frac{1}{2}$  feet above the sod-covered ground. On March 1, 1902, the station was again moved, this time to the town of Wauseon, distant nearly 1 mile and straight south. The Stevenson shelter was there set up to the north of his new residence. On March 22, 1902, a regular "cotton region" shelter furnished by the Weather Bureau, was set over sod about 30 feet north-northwest of the house and arranged to open to the north with the floor of the shelter 5 feet from the ground. Its present appearance, outfitted with an interior electric light for convenience in reading, is shown by figure 2. This shelter and location have been in use since March 22, 1902.

The exposure of the raingage has always been free and open, away from buildings and trees. Before 1882, whenever the snowfall exceeded 2 inches, the capacity of the gage, Mr. Mikesell employed a ring having the diameter of the rim of the raingage, cut down through a level depth of the snow to secure a sample cylinder, then melted this sample and measured the resulting water in the raingage. After 1882 he had made an extension top to the rain gage and of exactly the right size; this top he would fasten to the top of the gage thus catching and retaining the snow above the funnel. The snow thus caught he would melt and measure as usual. The method of cutting out a cylinder of snow which could later be melted and measured was the one prescribed for cooperative observers at the time it was practiced by Mr. Mikesell. The extension top to his standard raingage funnel was, however, a serious departure from the usual practice; in effect raising the mouth of the snowgauge considerably above the level of the raingage. It probably was not as accurate as the sampling method previously employed.

*Observing hours.*—Until November 1, 1882, Mr. Mikesell's observing hours were 5<sup>a</sup> (or in winter 6<sup>a</sup>), 1<sup>p</sup> and 9<sup>p</sup>, local time. From November 1, 1882, to December 1, 1883, the hours were 7<sup>a</sup>, 2<sup>p</sup>, and 9<sup>p</sup> by local time; and from the latter date to the present they have been 7<sup>a</sup>, 2<sup>p</sup>, and 9<sup>p</sup> by central standard time (ninetieth meridian time).

The mean temperature for the day was calculated by the formula  $\frac{1}{3}(5^a + 1^p + 9^p)$  for the observations up to November 1, 1882; for the subsequent observations the calculation was by the formula  $\frac{1}{4}(7^a + 2^p + 9^p + 9p)$ .

Before November 1, 1882, the highest and lowest temperatures were taken directly from observations of the thermometer, and although many special readings were taken it is probable that the published values are not always the true extreme temperatures. Self-registering thermometers have been in use since November 1, 1882.

*Use of the data.*—The present publication makes no attempt to formulate any correlation between the weather factors and the advance of vegetation. It has been deemed wisest first to present these priceless records in tabular form, making them available for the use of all students of phenological phenomena.

Mr. Mikesell's data relative to the advance of corn have been employed by J. Warren Smith in an article on the effect of the weather on the yield of corn. Other portions of his data are being used in studies of other crops, studies now under way.<sup>2</sup>

All the figures here published have been carefully checked. Mr. Mikesell has been found to be very accurate in all his records and observations, and we believe that the data here presented are as accurate as it is possible to make them.

The data here published were all furnished by Mr. Mikesell, but they have been retabulated by the office

force of the Columbus (Ohio) station of the Weather Bureau. Special credit, in this connection, is due Mr. H. B. Lake, who has transcribed most of the figures. It is believed that by publishing with the phenological records, the daily records of rainfall and temperature made at the same place and time by the same observer, the Weather Bureau is furnishing rare and closely related facts for the use of plant physiologists and agricultural meteorologists.

#### PHENOLOGICAL TABLES FOR WAUSEON, OHIO.

*Reference numbers.*—In the following tables the common names of wild plants, flowers, and trees have been used. These names are followed by reference numbers in curves, which refer the student to the corresponding number in the list of species on the following pages. This list of species has been selected from the list published by W. A. Kellerman<sup>3</sup> in his check list, "The Fourth State Catalogue of Ohio Plants," and has subsequently been revised by the United States Bureau of Plant Industry.

#### Reference numbers and specific names of plants.

##### Number.

- 234. Orchard grass. *Dactylis glomerata* L.
- 236. Wire grass. *Poa compressa* L.
- 237. June grass; Kentucky blue grass; spear grass. *Poa pratensis* L.
- 264. Chess; cheat. *Bromus secalinus* L.
- 463. Indian turnip. *Arisaema triphyllum* (L.) Torr.
- 464. Green dragon. *Arisaema dracontium* (L.) Schott.
- 512. Day lily. *Hemerocallis fulva* L.
- 520. Yellow lily; Canada lily. *Lilium canadense* L.
- 522. Yellow adder's tongue. *Erythronium americanum* Ker.
- 523. White adder's tongue. *Erythronium albidum* Nutt.
- 531. False Solomon's seal. *Vagnera racemosa* (L.) Morong. (*Smilacina racemosa* Desf.)
- 538. Smooth Solomon's seal. *Polygonatum commutatum* (R. & S.) Dietr. (*P. giganteum* Dietr.)
- 543. Large-flowered wake-robin. *Trillium grandiflorum* (Mx.) Salisb.
- 556. Large blue flag. *Iris versicolor* L.
- 600. Black walnut. *Juglans nigra* L.
- 603. Shell-bark; shag-bark hickory. *Hicoria ovata* (Mill.) Britt. (*Carya alba* Nutt.)
- 607. Pignut hickory. *Hicoria glabra* (Mill.) Britt. (*Carya porcina* Nutt.)
- 615. American aspen. *Populus tremuloides* Mx.
- 617. Cottonwood; Carolina poplar. *Populus deltoides* Marsh. (*P. monilifera* Ait.)
- 618. Black willow. *Salix nigra* Marsh.
- 644. Hop horn-beam; ironwood. *Ostrya virginiana* (Mill.) Willd.
- 645. Wild hazelnut. *Corylus americana* Walt.
- 660. Black oak. *Quercus velutina* Lam. (*Q. coccinea* var. *tinctoria* Gr.)
- 666. White oak. *Quercus alba* L.
- 667. Bur oak; mossy-cup oak. *Quercus macrocarpa* Mx.
- 668. Swamp white oak. (*Q. bicolor* Willd.) *Quercus platanoides* (Lam.) Sudw.
- 672. American elm; White elm. *Ulmus americana* L.
- 678. Osage orange. *Toxylum pomiferum* Raf. (*Maclura aurantiaca* Nutt.)
- 695. Sheep sorrel; field sorrel. *Rumex acetosella* L.
- 714. Smartweed. *Persicaria hydropiper* (L.) Opiz. (*Polygonum hydro-piper* L.)
- 715. Water smartweed; dotted smartweed. *Persicaria punctata* (Ell.) Small. (*Polygonum punctatum* Ell.; *P. acre* H. B. K.)
- 729. Lamb's quarters; pigweed. *Chenopodium album* L.

<sup>2</sup> Smith, J. Warren. Effect of weather upon the yield of corn. *MONTHLY WEATHER REVIEW*, Washington, Feb., 1914, 42:78-92.  
Effect of weather upon the yield of potatoes. *Ibid*, May 1915, 43: 222-236.

<sup>3</sup> See *Ohio State University*. University Bulletins, Series 4, No. 10, Columbus, Ohio, April, 1899. (Botanical series, No. 1.)



FIG. 2.—Thermometer screen and raingage in place as used by Mr. Mikesell, Wauseon, Ohio, 1902-1912.

759. Spring beauty. *Claytonia virginica* L.  
 762. Purslane. *Portulaca oleracea* L.  
 763. Corn campion; corn cockle. *Agrostemma githago* L. (*Lychnis githago* Lam.)  
 823. Wild columbine. *Aquilegia canadensis* L.  
 824. European columbine. *Aquilegia vulgaris* L.  
 826. Garden larkspur. *Delphinium ajacis* L.  
 829. Dwarf larkspur. *Delphinium tricorne* Mx.  
 836. Round-lobe liverleaf. *Hepatica triloba* (L.) Chaix. (*H. hepatica* (L.) Karst.)  
 842. Yellow crowfoot. *Ranunculus delphinifolius* Torr. (*R. multifidus* Ph.; incl. var. *terrestris* Gr.)  
 867. May apple; wild mandrake. *Podophyllum peltatum* L.  
 868. Moonseed. *Menispermum canadense* L.  
 869. Sassafras. *Sassafras variifolium* (Salisb.) Kuntze. (*S. sassafras* (L.) —; *S. officinale* Nees.)  
 876. Bloodroot. *Sanguinaria canadensis* L.  
 879. Dutchman's breeches. *Bicuculla cucullaria* (L.) Millsp. (*Dicentra cucullaria* DC.)  
 881. Wild bleeding-heart. *Bicuculla eximia* (Ker.) Millsp. (*Dicentra exima* DC.)  
 895. White mustard. *Sinapis alba* L. (*Brassica alba* L.)  
 896. Black mustard. *Brassica nigra* (L.) Koch.  
 907. Horse radish. *Radicula armoracia* (L.) Robinson. (*Armoracia armoracia* (L.) Britt.; *Armoracia rusticana* Gaertn.)  
 913. Purple bitter-cress. *Cardamine douglassii* (Torr.) Britton.  
 916. Cut-leaf pepper-root; Toothwort. *Dentaria laciniata* Muhl.  
 920. Shepherd's purse. *Bursa bursa-pastoris* (L.) Britt. (*Capsella bursa-pastoris* Moench.)  
 964. Mock orange; garden syringa. *Philadelphus coronarius* L.  
 972. Witch-hazel. *Hamamelis virginiana* L.  
 974. Sycamore; button-wood; button-ball. *Platanus occidentalis* L.  
 1003. Common five-finger. *Potentilla canadensis* L.  
 1021. Swamp rose. *Rosa carolina* L.  
 1023. Pasture rose. *Rosa virginiana* Mill. (*Rosa humilis lucida* (Ehrh.) Best., *R. lucida* Ehrh.)  
 1041. Red haw; scarlet thorn. *Crataegus coccinea* L.  
 1060. Kentucky coffee-tree. *Gymnocladus dioica* (L.) Koch. (*G. canadensis* Lam.)  
 1065. Wild lupine. *Lupinus perennis* L.  
 1066. Lucerne; alfalfa; purple medic; snail-clover. *Medicago sativa* L.  
 1068. White mellilot; white sweet-clover. *Melilotus alba* Desv.  
 1069. Yellow mellilot; yellow sweet-clover. *Melilotus officinalis* (L.) Lam.  
 1071. Low hop-clover. *Trifolium procumbens* L.  
 1077. Alsike clover; alsatian clover. *Trifolium hybridum* L.  
 1078. White clover. *Trifolium repens* L.  
 1099. Hoary tick-trefoil. *Meibomia canescens* (L.) Kuntze. (*Desmodium canescens* DC.)  
 1133. Wild cranebill; spotted cranebill. *Geranium maculatum* Tourn.  
 1143. Upright yellow wood-sorrel. *Oxalis stricta* L. (*O. corniculata* var. *stricta* Sav.)  
 1147. Slender yellow flax. *Linum virginianum* L.  
 1184. Staghorn sumac. *Rhus hirta* (L.) Sudw. (*R. typhina* L.)  
 1188. Poison sumac; poison oak; poison ivy. *Toxicodendron radicans* (L.) Kuntze. (*Rhus radicans* L.; *R. toxicodendron* L.)  
 1195. Wahoo; burning-bush. *Euonymus atropurpureus* Jacq.  
 1196. Climbing bitter-sweet. *Celastrus scandens* L.  
 1198. Silver maple; white maple; soft maple. *Acer saccharinum* L. (*A. dasycarpum* Ehrh.)  
 1200. Sugar maple; rock maple; sugar-tree. *Acer saccharum* Marsh. (*A. saccharinum* Wang.)  
 1204. Box elder; ash-leaf maple. *Acer negundo* L. (*Negundo aceroides* Moench.)  
 1205. Horse-chestnut; buckeye. *Aesculus glabra* Willd.  
 1220. American woodbine; Virginia creeper; ampelopsis. *Parthenocissus quinquefolia* (L.) Planch. (*Ampelopsis quinquefolia* Mx.)  
 1260. Early blue violet. *Viola palmata* L.  
 1261. Prairie, or larkspur violet. *Viola pedatifida* Don.  
 1262. Hooded blue violet. *Viola papilionacea* Pursh. (*Viola obliqua* Hill.) [Other synonyms in error.]  
 1263. Arrow-leaf violet. *Viola sagittata* Ait.  
 1265. Bird's-foot violet. *Viola pedata* L.  
 1267. Sweet white violet. *Viola blanda* Willd.  
 1269. Lance-leaf violet. *Viola lanceolata* L.  
 1272. Smoothish yellow violet. *Viola eriocarpa* Schwein. (*Viola scabriuscula* (T. & G.) Schw. *V. pubescens* var. *scabriuscula* T. & G.)  
 1273. Canada violet. *Viola canadensis* L.  
 1274. Pale, striped or cream-colored violet. *Viola striata* Ait.  
 1275. Dog violet. *Viola laboradorica* Schrnk. [Synonym in error.]  
 1276. Long-spur violet. *Viola rostrata* Ph.  
 1277. Pansy; heart's-ease. *Viola tricolor* L.  
 1363. Kinnikinnick; silky cornel. *Cornus amomum* Mill. (*C. sericea* L.)  
 1393. High-bush huckleberry; black huckleberry. *Gaylussacia baccata* (Wang.) K. Koch.  
 1398. Low blueberry; blue huckleberry. *Vaccinium vacillans* Kalm.  
 1408. Moneywort; creeping loosestrife. *Lysimachia nummularia* L.  
 1416. Persimmon; date-plum. *Diospyros virginiana* L.  
 1417. White ash. *Fraxinus americana* L.  
 1421. Black ash; hoop ash. *Fraxinus nigra* Marsh. (*F. sambucifolia* Lam.)  
 1438. Periwinkle. *Vinca minor* L.  
 1443. Butterfly-weed; pleurisy-root. *Asclepias tuberosa* L.  
 1446. Swamp milkweed. *Asclepias incarnata* L.  
 1453. Common milkweed; silkweed. *Asclepias syriaca* L. (*A. cornuti* Dec.)  
 1467. Hedge bind-weed; Rutland beauty; wild morning-glory. *Convolvulus sepium* L. (incl. var. *americanus* Sims.)  
 1481. Garden phlox. *Phlox paniculata* L.  
 1482. Wild sweet-william. *Phlox maculata* L. (incl. var. *candida* M.)  
 1485. Downy phlox. *Phlox pilosa* L.  
 1486. Wild blue phlox. *Phlox divaricata* L.  
 1487. Ground pink; moss pink. *Phlox subulata* L.  
 1507. Corn gromwell. *Lithospermum arvense* L.  
 1511. Hoary puccoon. *Lithospermum canescens* (Mx.) Lehm.  
 1518. Nettle-leaf verbain; white vervain. *Verbena urticifolia* L.  
 1519. Blue vervain; wild hyssop. *Verbena hastata* L.  
 1532. Hairy skullcap. *Scutellaria pilosa* Mx.  
 1541. Catnip. *Nepeta cataria* L.  
 1543. Common self-heal. *Prunella vulgaris* L.  
 1547. Motherwort. *Leonurus cardiaca* L.  
 1605. Bittersweet; blue bindweed; fellowwort. *Solanum dulcamara* L.  
 1609. Purple stramonium. *Datura stramonium* L.  
 1610. Common mullein. *Verbascum thapsus* L.  
 1640. Culver's-root. *Leptandra virginica* (L.) Nutt. (*Veronica virginica* L.)  
 1666. Trumpet creeper. *Bignonia radicans* L. (*Tecoma radicans* (L.) DC.)  
 1675. Common or broad-leaf plantain. *Plantago major* L.  
 1688. Button bush; globe flower. *Cephaelanthus occidentalis* L.  
 1703. Common elder; sweet elder. *Sambucus canadensis* L.  
 1706. Snow ball. *Viburnum opulus* L.  
 1712. Black haw; stag-bush. *Viburnum prunifolium* L.  
 1723. Trumpet honeysuckle. *Lonicera sempervirens* Ait.  
 1724. Chinese honeysuckle. *Lonicera japonica* Thumb.  
 1728. Tartarian bush-honeysuckle. *Lonicera tartarica* L.  
 1729. Bush honeysuckle. *Diervilla lonicera* Mill. (*Diervilla diervilla* (L.) MacM.; *D. trifida* Moench.)  
 1739. Wild teasel. *Dipsacus sylvestris* Mill.  
 1762. Dandelion; blowball. *Leontodon taraxacum* L. (*Taraxacum taraxacum* (L.) Karst.; *T. officinale* Weber.)  
 1766. Prickly lettuce. *Lactuca virosa* L. (*Lactuca scariola* L.)  
 1767. Wild lettuce; tall lettuce. *Lactuca canadensis* L.  
 1788. Great ragweed; horse ragweed; bitterweed. *Ambrosia trifida* L.  
 1790. Ragweed; hogweed; bitter-weed; Roman wormwood. *Ambrosia elatior* L. (*Ambrosia artemesiaeefolia* L.)

1794. American cocklebur. *Xanthium pensylvanicum* Wallr. [*Xanthium canadense* Mill. (incl. var. *echinatum* Gr.)]
1797. Tall ironweed. *Vernonia altissima* Nutt. (*Vernonia gigantea* (Walt.) Britt.)
1806. Boneset; thoroughwort; Indian sage. *Eupatorium perfoliatum* L.
1898. Philadelphia fleabane. *Erigeron philadelphicus* L.
1899. Sweet scabious; white-top. *Erigeron annuus* (L.) Pers.
1900. Daisy fleabane. *Erigeron ramosus* (Walt.) B. S. P. (*E. strigosus* Muhl.)
1931. Black-eyed Susan. *Rudbeckia hirta* L.
1937. Common sunflower. *Helianthus annuus* L.
1947. Oblong-leaf sunflower. *Helianthus doronicoides* Lam.
1961. Tall tickseed. *Coreopsis tripteris* L.
1964. Swamp beggar-ticks. *Bidens connata* Muhl.
1967. Beggar-ticks; stick-tight. *Bidens frondosa* L.
1968. Spanish needles. *Bidens bipinnata* L.
1979. Yarrow; milfoil. *Achillea millefolium* L.
1980. May-weed; dog fennel. *Anthemis cotula* DC.
1990. Tansy. *Tanacetum vulgare* L.
1999. Fire-weed; pilewort. *Erechtites hieracifolia* (L.) Raf.
2002. Common spear thistle. *Cirsium lanceolatum* (L.) Hill. (*Carduus lanceolatus* L.; *Cnicus lanceolatus* Hoffm.)
2009. Burdock. *Arctium lappa* L.
2012. Common thistle. *Cirsium lanceolatum* (L.) Hill. (*Carduus lanceolatus* L.)
2017. Swamp thistle. *Cirsium muticum* Michx. (*Carduus muticus* (Mx.) Pers.; *Cnicus muticus* Ph.)
2018. Canada thistle. *Cirsium arvense* (L.) Scop. (*Carduus arvensis* (L.) Robs.; *Cnicus arvensis* Hoffm.)

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 1.—*Phenological observations at Wauseon, Ohio, on 16 different kinds of fruits, 1883 to 1912, inclusive.*

## APPLES (King).

Year.	Buds started.	First fully formed leaf.	Days from 2 to 4	In full leaf.	First bloom.	In full bloom.	Days from 6 to 8	Fruit ripe.	Complete change in foliage.	Days from 9 to 11	Divested of leaves.	Quantity of fruit.	Quality of fruit.
	1	2	3	4	5	6	7	8	9	10	11	12	13
1883	Apr. 29	May 10	7	May 17	May 17	May 20	134	Oct. 1	Oct. 15	17	Nov. 1	-----	
1884	Apr. 28	May 5	6	May 11	May 13	May 18	135	Sept. 30	Oct. 20	19	Nov. 8	-----	
1885	May 3	May 16	9	May 25	May 18	May 22	132	Oct. 1	Oct. 9	29	Nov. 7	-----	
1886	Apr. 15	Apr. 23	9	May 2	Apr. 25	Apr. 28	143	Sept. 18	Oct. 18	16	Nov. 3	Full.	Good.
1887	Apr. 21	Apr. 28	12	May 10	May 10	May 14	139	Sept. 30	Oct. 15	21	Nov. 5	Fair.	Good.
1888	Apr. 28	May 8	10	May 18	May 11	May 15	140	Oct. 2	Oct. 20	10	Oct. 30	Full.	Good.
1889	Apr. 21	May 3	6	May 9	May 7	May 11	147	Oct. 5	Oct. 8	16	Oct. 24	Scant.	Good.
1890	Apr. 22	Apr. 30	8	May 8	May 5	May 9	134	Sept. 20	Oct. 5	40	Nov. 14	Scant.	Fair.
1891	Apr. 22	Apr. 28	12	May 10	May 6	May 10	144	Oct. 1	Oct. 23	16	Nov. 8	Full.	Good.
1892	Apr. 25	May 5	13	May 18	May 14	May 18	136	Oct. 1	Oct. 30	9	Nov. 8	Fair.	Good.
1893	Apr. 14	May 7	11	May 18	May 11	May 14	140	Oct. 1	Oct. 16	32	Nov. 17	Scant.	Good.
1894	Apr. 17	Apr. 27	9	May 6	May 5	May 8	133	Sept. 18	Oct. 15	21	Nov. 5	Scant.	Good.
1895	Apr. 23	May 2	8	May 10	May 2	May 5	148	Sept. 30	Oct. 22	14	Nov. 5	Scant.	Fair.
1896	Apr. 17	Apr. 24	7	May 1	Apr. 27	Apr. 30	153	Sept. 30	Oct. 22	14	Nov. 5	Full.	Good.
1897	Apr. 23	Apr. 30	12	May 12	May 9	May 13	-----	None.	Oct. 2	23	Oct. 25	None.	
1898	Apr. 15	Apr. 29	13	May 12	May 4	May 8	145	Sept. 30	-----	-----	-----	-----	
1899	Apr. 25	May 3	9	May 12	May 1	May 5	138	Sept. 20	-----	-----	-----	-----	
1900	-----	-----	-----	May 9	-----	-----	-----	-----	-----	-----	-----	-----	
1901	-----	-----	-----	May 9	-----	-----	-----	-----	-----	-----	-----	-----	
1902	-----	-----	-----	May 1	-----	-----	-----	-----	-----	-----	-----	-----	
1903	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1904	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1905	Apr. 22	May 3	12	May 15	May 14	May 18	136	Oct. 1	-----	2	Nov. 4	Not few.	Good.
1906	Apr. 19	May 2	12	May 12	May 2	May 6	137	Sept. 20	Nov. 2	2	Nov. 4	Scant.	Fair.
1907	May 1	May 13	9	May 22	May 11	May 15	123	Sept. 15	Oct. 20	21	Nov. 10	Scant.	Good.
1908	Apr. 21	May 6	12	May 18	May 8	May 12	129	Sept. 18	Nov. 8	14	Nov. 22	Scant.	Good.
1909	Apr. 18	May 13	7	May 20	May 14	May 17	128	Sept. 22	Oct. 20	24	Nov. 13	Scant.	Fair.
1910	Apr. 10	Apr. 22	13	May 5	Apr. 17	Apr. 22	146	Sept. 15	Oct. 25	16	Nov. 10	Not full.	Good.
1911	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1912	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Average	Apr. 22	May 4	9	May 13	May 7	May 11	138	Sept. 26	Oct. 20	18	Nov. 7	-----	
Earliest	Apr. 10	Apr. 22	6	May 1	Apr. 17	Apr. 22	123	Sept. 15	Oct. 2	2	Oct. 24	-----	
Latest	May 3	May 16	13	May 25	May 18	May 22	153	Oct. 5	Nov. 8	40	Nov. 22	-----	

## PEAR (Bartlett).

1883	Apr. 29	May 7	6	May 13	May 9	May 12	131	Sept. 23	Sept. 18	13	Oct. 1	-----	
1884	Apr. 28	May 8	8	May 16	May 8	May 12	121	Sept. 10	Oct. 9	16	Oct. 25	-----	
1885	May 13	May 19	4	May 23	May 17	May 21	110	Sept. 6	Sept. 23	17	Oct. 10	-----	
1886	Apr. 22	Apr. 28	8	May 6	Apr. 25	Apr. 28	96	Aug. 22	Oct. 8	4	Oct. 12	Scant.	Fair.
1887	Apr. 29	May 9	6	May 15	May 7	May 11	104	Aug. 23	Sept. 25	10	Oct. 5	Full.	Good.
1888	Apr. 30	May 10	8	May 18	May 10	May 13	115	Sept. 5	Oct. 18	6	Oct. 24	Scant.	Fair.
1889	Apr. 23	May 1	9	May 10	May 4	May 7	118	Sept. 2	Sept. 23	9	Oct. 2	Full.	Good.
1890	Apr. 23	May 2	10	May 12	May 2	May 6	106	Aug. 21	Oct. 8	16	Oct. 24	Scant.	Fair.
1891	Apr. 20	Apr. 28	12	May 10	Apr. 30	May 4	125	Sept. 6	Oct. 6	22	Oct. 28	Full.	Good.
1892	Apr. 30	May 10	10	May 20	May 12	May 15	128	Sept. 20	Oct. 12	10	Oct. 22	Scant.	Poor.
1893	Apr. 30	May 14	7	May 21	May 12	May 15	107	Aug. 30	Oct. 16	14	Oct. 30	Full.	Good.
1894	Apr. 17	Apr. 28	7	May 5	Apr. 26	Apr. 30	120	Aug. 28	Oct. 5	11	Oct. 16	Full.	Good.
1895	Apr. 24	May 3	7	May 10	May 3	May 6	118	Sept. 1	Oct. 22	8	Oct. 30	Full.	Good.
1896	Apr. 19	Apr. 24	7	May 1	Apr. 25	Apr. 29	118	Aug. 25	Sept. 26	8	Oct. 4	Full.	Good.
1897	Apr. 25	May 4	8	May 12	May 8	May 12	110	Aug. 30	Oct. 8	12	Oct. 20	Scant.	Fair.
1898	Apr. 16	Apr. 27	11	May 8	Apr. 28	May 2	136	Sept. 15	-----	-----	-----	-----	
1899	Apr. 26	May 1	9	May 10	Apr. 29	May 3	-----	None.	-----	-----	-----	-----	
1900	-----	-----	-----	May 7	-----	-----	-----	-----	-----	-----	-----	-----	
1901	-----	-----	-----	May 3	-----	-----	-----	-----	-----	-----	-----	-----	
1902	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1903	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1904	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1905	Apr. 22	May 12	10	May 22	May 7	May 13	130	Sept. 20	Sept. 30	20	Oct. 20	Full.	Good.
1906	Apr. 19	May 1	12	May 13	Apr. 30	May 5	133	Sept. 15	Sept. 10	29	Oct. 26	Scant.	Good.
1907	May 4	May 14	8	May 22	May 11	May 16	122	Sept. 15	Sept. 27	9	Nov. 3	Scant.	Good.
1908	Apr. 21	May 6	11	May 17	Apr. 27	May 1	111	Aug. 20	Oct. 25	10	Oct. 25	Scant.	Good.
1909	May 3	May 14	10	May 24	May 9	May 12	126	Sept. 15	Oct. 15	26	Nov. 15	Full.	Good.
1910	Apr. 10	Apr. 22	14	May 6	Apr. 12	Apr. 16	155	Sept. 18	Oct. 20	-----	-----	-----	
1911	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
1912	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Average	Apr. 25	May 5	9	May 14	May 3	May 7	122	Sept. 6	Oct. 8	13	Oct. 21	-----	
Earliest	Apr. 10	Apr. 22	4	May 1	Apr. 12	Apr. 16	96	Aug. 20	Sept. 18	4	Oct. 1	-----	
Latest	May 13	May 19	14	May 24	May 17	May 21	155	Sept. 23	Oct. 28	29	Nov. 15	-----	

## SUPPLEMENT NO. 2.

TABLE 1.—*Phenological observations at Wauseon, Ohio, on 16 different kinds of fruits, 1883 to 1912, inclusive—Continued.***PEACH** (late Crawford).

Year.	Buds started.	First fully formed leaf.	Days from 2 to 4	In full leaf.	First bloom.	In full bloom.	Days from 6 to 8	Fruit ripe.	Complete change in foliage.	Days from 9 to 11	Divested of leaves.	Quantity of fruit.	Quality of fruit.
	1	2	3	4	5	6	7	8	9	10	11	12	13
1883.....	Apr. 29	May 15	7	May 22	May 13	May 17	136	Sept. 30	Sept. 22	18	Oct. 10	.....	
1884.....	Apr. 30	May 11	9	May 20	May 4	May 8	.....	None.	Oct. 24	32	Nov. 25	.....	
1885.....	May 2	May 19	7	May 26	None.	.....	.....	None.	Oct. 9	22	Oct. 31	.....	
1886.....	Apr. 16	Apr. 30	9	May 9	Apr. 23	Apr. 26	147	Sept. 20	Oct. 23	13	Nov. 5	Scant.	
1887.....	Apr. 16	May 1	15	May 16	May 3	May 7	136	Sept. 20	Oct. 10	20	Oct. 30	Full.	
1888.....	May 8	May 15	6	May 21	May 6	May 9	139	Sept. 25	Oct. 28	9	Nov. 6	Scant.	
1889.....	Apr. 19	May 1	11	May 12	Apr. 23	Apr. 26	141	Sept. 14	Sept. 24	34	Oct. 28	Full.	
1890.....	Apr. 16	Apr. 27	13	May 10	Apr. 16	Apr. 20	.....	None.	Oct. 10	29	Nov. 8	None.	
1891.....	Apr. 18	Apr. 30	8	May 8	Apr. 23	Apr. 27	151	Sept. 25	Oct. 11	36	Nov. 16	Full.	
1892.....	Apr. 27	May 6	14	May 20	May 7	May 11	.....	None.	Oct. 30	8	Nov. 8	None.	
1893.....	Apr. 14	May 6	12	May 18	May 10	May 13	140	Sept. 30	Nov. 5	5	Nov. 10	Scant.	
1894.....	Apr. 6	Apr. 28	12	May 10	Apr. 17	Apr. 20	163	Sept. 20	Oct. 15	17	Nov. 1	Full.	
1895.....	Apr. 20	May 3	8	May 11	May 2	May 6	139	Sept. 22	Oct. 30	11	Nov. 10	Full.	
1896.....	Apr. 18	Apr. 24	8	May 2	Apr. 23	Apr. 27	134	Sept. 8	Oct. 22	14	Nov. 5	Full.	
1897.....	Apr. 24	May 5	7	May 12	None.	.....	.....	None.	Oct. 16	11	Oct. 27	None.	
1898.....	Apr. 17	May 1	12	May 13	Apr. 27	May 1	127	Sept. 5	.....	.....	.....	.....	
1899.....	Apr. 23	May 1	9	May 10	Apr. 28	May 2	141	Sept. 15	.....	.....	.....	.....	
1900.....					Apr. 28								
1901.....					Apr. 29								
1902.....					Apr. 29								
1903.....													
1904.....		May 15	10	May 25	May 7	May 12	123	Sept. 12	.....	.....	Not few.	Good,	
1905.....	Apr. 22	May 5	9	May 14	Apr. 28	May 2	131	Sept. 10	Oct. 5	30	Nov. 4	Scant.	
1906.....	Apr. 23	May 4	14	May 18	Apr. 29	May 4	131	Sept. 12	Oct. 25	14	Nov. 8	Full.	
1907.....	Apr. 20	May 16	8	May 24	Apr. 30	May 4	124	Sept. 5	Oct. 10	5	Nov. 8	Scant.	
1908.....	Apr. 24	May 16	9	May 25	Apr. 23	Apr. 27	.....	None.	Nov. 3	5	Nov. 8	None.	
1909.....	Apr. 13	May 5	11	May 16	May 7	May 11	.....	None.	Oct. 20	16	Nov. 5	None.	
1910.....		Apr. 5	26	May 1	Apr. 4	Apr. 9	152	Sept. 8	Oct. 18	18	Nov. 5	Not full.	
1911.....		May 15	12	May 27	May 1	May 4	124	Sept. 5	Oct. 5	38	Nov. 11	Full.	
1912.....	Apr. 23	May 4	12	May 16	May 6	May 11	122	Sept. 10	Nov. 9	1	Nov. 10	Scant.	
Average.....	Apr. 21	May 5	10	May 15	Apr. 28	May 3	136	Sept. 16	Oct. 18	18	Nov. 5	.....	
Earliest.....	Apr. 6	Apr. 5	6	May 1	Apr. 4	Apr. 9	122	Sept. 5	Sept. 22	5	Oct. 10	.....	
Latest.....	May 8	May 19	26	May 27	May 13	May 17	153	Sept. 30	Nov. 9	38	Nov. 25	.....	

**PLUM.**

1883.....	May 6	May 16	9	May 25	May 13	May 16	.....	Sept. 8	17	Sept. 25	.....		
1884.....	Apr. 29	May 10	10	May 20	May 8	May 11	.....	None.	Oct. 18	37	Nov. 24	.....	
1885.....	May 6	May 18	9	May 27	May 14	May 16	.....	.....	Oct. 9	12	Oct. 21	.....	
1886.....	Apr. 20	Apr. 30	10	May 10	Apr. 23	Apr. 26	120	Aug. 24	Oct. 5	10	Oct. 15	Scant.	
1887.....	Apr. 30	May 5	11	May 16	Apr. 30	May 3	122	Sept. 2	Oct. 10	4	Oct. 20	Scant.	
1888.....	May 8	May 17	5	May 22	May 2	May 10	121	Sept. 8	Oct. 5	11	Oct. 16	Scant.	
1889.....	Apr. 25	May 9	6	May 15	May 3	May 6	116	Aug. 30	Sept. 10	15	Sept. 25	Scant.	
1890.....	Apr. 22	May 5	13	May 18	Apr. 23	Apr. 27	134	Sept. 8	Oct. 8	17	Oct. 25	Full.	
1891.....	Apr. 25	May 2	12	May 14	Apr. 28	May 3	113	Aug. 24	Oct. 23	8	Oct. 31	Full.	
1892.....	Apr. 30	May 12	8	May 20	May 4	May 7	.....	None.	Oct. 5	13	Oct. 18	None.	
1893.....	Apr. 17	May 10	10	May 20	May 8	May 11	.....	None.	Oct. 12	13	Oct. 25	None.	
1894.....	Apr. 25	May 3	10	May 13	Apr. 24	Apr. 27	96	Aug. 1	Oct. 5	20	Oct. 25	Scant.	
1895.....	Apr. 24	May 3	9	May 12	Apr. 30	May 4	116	Aug. 28	Oct. 11	11	Oct. 22	Scant.	
1896.....	Apr. 17	Apr. 24	8	May 2	Apr. 20	Apr. 25	121	Aug. 24	Oct. 2	10	Oct. 12	Scant.	
1897.....	Apr. 22	May 1	7	May 8	May 3	May 7	.....	None.	Sept. 30	10	Oct. 10	None.	
1898.....	Apr. 17	Apr. 26	17	May 13	Apr. 26	Apr. 30	.....	None.	.....	.....	.....	None.	
1899.....	Apr. 24	May 1	9	May 10	Apr. 27	Apr. 30	.....	None.	.....	.....	.....	.....	
1900.....					Apr. 29	May 3	.....	.....	.....	.....	.....	.....	
1901.....					Apr. 30	May 5	.....	.....	.....	.....	.....	.....	
1902.....					Apr. 25	May 1	.....	.....	.....	.....	.....	.....	
1903.....							.....	.....	.....	.....	.....	.....	
1904.....		May 12	9	May 21	May 5	May 9	108	Aug. 25	Oct. 3	27	Oct. 30	Full.	Good.
1905.....	Apr. 22	May 2	8	May 10	Apr. 25	Apr. 28	119	Aug. 28	Oct. 19	11	Oct. 30	Scant.	Fair.
1906.....	Apr. 24	May 5	11	May 16	Apr. 28	May 1	.....	None.	Oct. 20	15	Nov. 20	None.	
1907.....	May 4	May 13	8	May 21	Apr. 29	May 3	.....	None.	Nov. 5	16	Nov. 5	None.	
1908.....	Apr. 22	May 15	10	May 25	Apr. 24	Apr. 28	.....	None.	Oct. 20	21	Nov. 10	Full.	Good.
1909.....	Apr. 28	May 8	10	May 18	May 6	May 10	.....	None.	Oct. 20	16	Nov. 5	None.	
1910.....	Apr. 14	Apr. 27	11	May 8	Apr. 6	Apr. 11	129	Aug. 18	Oct. 20	21	Nov. 10	Full.	
1911.....		May 13	9	May 22	Apr. 30	May 4	120	Sept. 1	Oct. 20	23	Nov. 12	Scant.	
1912.....	May 4	May 8	12	May 20	May 7	May 10	.....	None.	Oct. 20	11	Oct. 31	None.	Good.
Average.....	Apr. 25	May 6	10	May 16	Apr. 30	May 4	115	Aug. 27	Oct. 10	15	Oct. 25	.....	
Earliest.....	Apr. 14	Apr. 24	5	May 2	Apr. 6	Apr. 11	96	Aug. 1	Sept. 8	4	Sept. 25	.....	
Latest.....	May 8	May 18	17	May 27	May 14	May 16	134	Sept. 8	Nov. 5	37	Nov. 24	.....	

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

TABLE 1.—*Phenological observations at Wauseon, Ohio, on 16 different kinds of fruits, 1883 to 1912, inclusive—Continued.*

### **CHERRY** (early Richmond).

Year.	Buds started.	First fully formed leaf.	Days from 2 to 4	In full leaf.	First bloom.	In full bloom.	Days from 6 to 8	Fruit ripe.	Complete change in foliage.	Days from 9 to 11	Divested of leaves.	Quantity of fruit.	Quality of fruit.
	1	2	3	4	5	6	7	8	9	10	11	12	13
1883													
1884	May 2	May 16	6	May 22	May 9	May 14	57	July 10	Sept. 12	33	Oct. 15		
1885	May 1	May 8	7	May 15	May 6	May 10	49	June 28	Oct. 24	27	Nov. 20		
1886	Apr. 30	May 15	10	May 25	May 16	May 18	44	July 1	Oct. 9	22	Oct. 31		
1887	Apr. 18	Apr. 28	8	May 6	Apr. 23	Apr. 27	43	June 9	Nov. 1	9	Nov. 10	Full.	Good.
1888	Apr. 27	Apr. 4	8	May 12	May 3	May 7	38	June 14	Oct. 20	8	Oct. 28	Scant.	Good.
1889	Apr. 30	May 9	9	May 18	May 5	May 8	40	June 17	Oct. 18	15	Nov. 2	Full.	Good.
1890	Apr. 20	May 3	6	May 9	Apr. 26	Apr. 29	51	June 19	Oct. 8	12	Oct. 20	Full.	Good.
1891	Apr. 23	May 3	5	May 8	Apr. 29	May 2	47	June 18	Oct. 24	10	Nov. 3	Full.	Good.
1892													
1893	Apr. 19	Apr. 30	8	May 8	Apr. 28	May 2	49	June 20	Oct. 6	25	Oct. 31	Full.	Good.
1894	Apr. 30	May 9	9	May 18	May 4	May 8	48	June 25	Oct. 30	8	Nov. 8	Scant.	Fair.
1895	Apr. 19	May 8	10	May 18	May 7	May 11	42	June 22	Oct. 27	12	Nov. 8	Full.	Good.
1896	Apr. 24	May 2	9	May 11	Apr. 26	Apr. 30	47	June 16	Oct. 15	21	Nov. 5	Full.	Good.
1897	Apr. 24	May 3	9	May 12	May 1	May 5	46	June 20	Oct. 22	11	Nov. 2	Full.	Good.
1898	Apr. 16	Apr. 22	7	Apr. 29	Apr. 21	Apr. 25	39	June 3	Oct. 12	12	Oct. 24	Full.	Good.
1899	Apr. 25	May 5	7	May 12	May 5	May 10	43	June 22	Oct. 22	19	Nov. 10	Full.	Good.
1900	Apr. 18	Apr. 27	15	May 12	Apr. 28	May 2	48	June 19					
1901	Apr. 25	May 1	7	May 8	Apr. 27	Apr. 30	47	June 16					
1902													
1903													
1904													
1905													
1906	Apr. 22	May 14	9	May 23	May 7	May 12	47	June 28					
1907	Apr. 25	May 6	8	May 12	Apr. 25	Apr. 29	46	June 14	Oct. 30	13	Nov. 12	Full.	Good.
1908	Apr. 25	May 4	10	May 14	Apr. 29	May 3	40	June 12					
1909	May 1	May 12	10	May 22	May 5	May 9		None.	Oct. 19	11	Oct. 30	None.	Good.
1910	Apr. 21	May 16	7	May 23	May 1	May 5		None.	Nov. 2	13	Nov. 15	None.	Good.
1911	May 6	May 15	8	May 23	May 10	May 15	42	June 26	Oct. 12	16	Oct. 28	Scant.	Good.
1912	Apr. 15	Apr. 29	11	May 10	Apr. 10	Apr. 14	72	June 25	Oct. 12	18	Oct. 30	Scant.	Good.
1913													
Average Earliest	Apr. 24	May 16	9	May 25	Apr. 30	May 5	48	June 22	Oct. 30	13	Nov. 12	Full.	Good.
Latest	Apr. 15	Apr. 22	5	Apr. 29	Apr. 10	Apr. 14	38	June 3	Sept. 12	8	Oct. 15	Not full.	Good.
	May 6	May 16	15	May 25	May 16	May 18	72	July 10	Nov. 2	33	Nov. 20		

## **RED Currant.**

## SUPPLEMENT NO. 2.

TABLE 1.—*Phenological observations at Wauseon, Ohio, on 16 different kinds of fruits, 1883 to 1912, inclusive—Continued.*

## GARDEN GOOSEBERRY.

Year.	Buds started.	First fully formed leaf.	Days from 2 to 4	In full leaf.	First bloom.	In full bloom.	Days from 6 to 8	Fruit ripe.	Complete change in foliage.	Days from 9 to 11	Divested of leaves.	Quantity of fruit.	Quality of fruit.
	1	2	3	4	5	6	7	8	9	10	11	12	13
1883.....	Apr. 21	May 8	9	May 15	May 15	May 22	64	July 25	Sept. 2	10	Sept. 12	.....	
1884.....	Apr. 10	Apr. 25	10	May 5	May 9	May 15	61	July 15	Oct. 9	21	Oct. 30	.....	
1885.....	Apr. 21	May 2	9	May 11	May 15	May 20	45	July 14	Oct. 9	32	Nov. 10	.....	
1886.....	Apr. 16	Apr. 21	7	Apr. 28	Apr. 24	Apr. 30	69	July 8	Nov. 2	14	Nov. 16	Full.....	Good.
1887.....	Apr. 7	Apr. 25	10	May 5	May 4	May 9	56	July 4	Oct. 28	13	Nov. 10	Scant.....	Good.
1888.....	Apr. 5	Apr. 23	11	May 11	May 10	May 14	57	July 10	Oct. 12	24	Nov. 5	Scant.....	Good.
1889.....	Apr. 6	Apr. 24	6	Apr. 30	Apr. 29	May 3	74	July 16	Sept. 25	15	Oct. 10	Scant.....	Fair.
1890.....	Apr. 7	Apr. 13	13	Apr. 26	May 8	May 13	63	July 15	Oct. 10	14	Oct. 24	Scant.....	Good.
1891.....	Apr. 10	Apr. 20	8	Apr. 28	Apr. 27	May 2	59	June 30	Oct. 23	14	Nov. 6	Scant.....	Good.
1892.....	Apr. 2	Apr. 22	11	May 3	May 1	May 6	55	June 30	Oct. 18	17	Nov. 4	Scant.....	Good.
1893.....	Apr. 6	Apr. 16	10	Apr. 26	May 5	May 9	62	July 10	Oct. 17	22	Nov. 8	Scant.....	Fair.
1894.....	Mar. 15	Apr. 15	11	Apr. 26	Apr. 24	Apr. 30	71	July 10	Oct. 5	27	Nov. 1	Scant.....	Fair.
1895.....	Apr. 8	Apr. 20	9	Apr. 29	May 10	May 14	46	June 29	Oct. 8	12	Oct. 20	Scant.....	Good.
1896.....	Apr. 12	Apr. 17	6	Apr. 23	Apr. 26	Apr. 30	61	June 30	Oct. 2	13	Oct. 15	Full.....	Good.
1897.....	Apr. 3	Apr. 17	11	Apr. 28	May 3	May 6	80	July 25	Oct. 20	19	Nov. 8	Full.....	Good.
1898.....	Apr. 8	Apr. 18	8	Apr. 26	Apr. 20	Apr. 24	77	July 10	.....	.....	.....	.....	
1899.....	Apr. 17	Apr. 23	6	Apr. 29	Apr. 28	May 4	67	July 10	.....	.....	.....	.....	
1900.....				May 3									
1901.....				May 3									
1902.....													
1903.....													
1904.....													
1905.....	Apr. 1	Apr. 9	26	May 5	Apr. 29	May 5	62	July 6	Sept. 25	10	Oct. 5	Full.....	Good.
1906.....	Apr. 6	Apr. 18	10	Apr. 28	Apr. 29	May 5	66	July 10	.....	.....	.....	.....	
1907.....	Mar. 26	Mar. 29	31	Apr. 29	May 3	May 8	78	July 25	Sept. 27	18	Oct. 15	Full.....	Good.
1908.....	Apr. 4	Apr. 28	5	May 3	Apr. 23	Apr. 28	63	June 30	Oct. 20	10	Oct. 30	Full.....	Good.
1909.....	Apr. 6	Apr. 18	13	May 1	May 6	May 10	66	July 15	Sept. 25	15	Oct. 10	Full.....	Good.
1910.....	Mar. 28	Apr. 5	8	Apr. 13	Apr. 14	Apr. 19	83	July 11	.....	.....	.....	.....	
1911.....													
1912.....													Good.
Average.....	Apr. 6	Apr. 19	11	Apr. 30	May 2	May 6	65	July 10	Oct. 9	17	Oct. 26	.....	
Earliest.....	Mar. 16	Mar. 29	5	Apr. 13	Apr. 14	Apr. 19	46	June 29	Sept. 2	10	Sept. 12	.....	
Latest.....	Apr. 21	May 6	31	May 15	May 15	May 22	83	July 25	Nov. 2	32	Nov. 16	.....	

## RED RASPBERRY.

1883.....													
1884.....	Apr. 16	Apr. 28	8	May 6	June 2	June 6	32	July 8	Oct. 24	34	Nov. 27	.....	
1885.....	Apr. 23	Apr. 30	6	May 6	June 5	June 8	32	July 10	Oct. 9	32	Nov. 10	.....	
1886.....	Apr. 15	Apr. 20	5	Apr. 25	May 23	May 27	24	June 20	Oct. 24	14	Nov. 7	Full.....	Good.
1887.....	Apr. 12	Apr. 30	7	May 7	May 24	May 28	34	July 1	Oct. 26	10	Nov. 5	Full.....	Good.
1888.....	Apr. 12	Apr. 29	9	May 8	June 8	June 11	27	July 8	Nov. 1	9	Nov. 10	Full.....	Good.
1889.....	Apr. 18	Apr. 27	7	May 7	May 28	May 31	34	July 4	Oct. 8	17	Oct. 25	Full.....	Good.
1890.....	Apr. 9	Apr. 22	6	Apr. 28	June 3	June 6	23	June 29	Oct. 24	10	Nov. 3	Full.....	Good.
1891.....	Apr. 14	Apr. 22	6	Apr. 28	May 31	June 3	26	June 29	Oct. 23	23	Nov. 15	Full.....	Good.
1892.....	Apr. 10	Apr. 30	12	May 12	June 2	June 6	27	July 3	Oct. 30	8	Nov. 8	Scant.....	Fair.
1893.....	Apr. 10	Apr. 30	12	May 12	May 29	June 3	30	July 3	Oct. 27	12	Nov. 8	Scant.....	Fair.
1894.....	Mar. 22	Apr. 24	10	May 4	May 26	May 30	36	July 5	Oct. 15	10	Oct. 25	Full.....	Good.
1895.....	Apr. 18	Apr. 25	8	May 3	May 24	May 28	31	June 28	Oct. 12	6	Oct. 18	Full.....	Good.
1896.....	Apr. 12	Apr. 18	8	Apr. 26	May 18	May 23	23	June 25	Oct. 22	14	Nov. 5	Full.....	Good.
1897.....	Apr. 8	Apr. 16	12	Apr. 28	June 4	June 8	28	July 6	Oct. 30	13	Nov. 12	Full.....	Good.
1898.....	Apr. 9	Apr. 16	12	Apr. 28	May 31	June 3	26	June 29	.....	.....	.....	.....	
1899.....	Apr. 10	Apr. 27	8	May 5	May 22	May 26	29	June 24	.....	.....	.....	.....	
1900.....					May 23								
1901.....													
1902.....													
1903.....													
1904.....													
1905.....	Apr. 18	May 2	10	May 18	June 10	June 14	23	July 7	.....	5	Nov. 4	Full.....	Good.
1906.....	Apr. 21	May 3	11	May 14	May 30	June 4	34	July 5	Oct. 30	5	Nov. 4	Full.....	Good.
1907.....	May 4	May 15	5	May 20	June 18	June 22	28	July 20	Oct. 19	11	Oct. 30	Full.....	Good.
1908.....	Apr. 2	May 1	16	May 17	May 25	May 29	31	June 29	Oct. 20	13	Nov. 2	Full.....	Good.
1909.....	Apr. 28	May 8	10	May 18	June 3	June 7	38	July 15	Oct. 18	16	Nov. 3	Full.....	Good.
1910.....	Mar. 30	Apr. 10	10	Apr. 20	June 6	June 11	23	July 4	.....	.....	.....	Not full.....	Good.
1911.....													
1912.....	Apr. 22	May 1	10	May 10	May 24	May 28	36	July 3	Oct. 20	16	Nov. 5	Full.....	Good.
Average.....	Apr. 13	Apr. 27	9	May 6	May 30	June 4	29	July 3	Oct. 22	15	Nov. 6	.....	
Earliest.....	Mar. 22	Apr. 10	5	Apr. 20	May 18	May 23	23	June 20	Oct. 8	5	Oct. 18	.....	
Latest.....	Apr. 28	May 15	16	May 20	June 18	June 22	39	July 20	Nov. 1	34	Nov. 27	.....	

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 1.—*Phenological observations at Wauseon, Ohio, on 16 different kinds of fruits, 1883 to 1912, inclusive—Continued.*

## BLACK RASPBERRY.

Year.	Buds started.	First fully formed leaf.	Days from 2 to 4	In full leaf.	First bloom.	In full bloom.	Days from 6 to 8	Fruit ripe.	Complete change in foliage.	Days from 9 to 11	Divested of leaves.	Quantity of fruit.	Quality of fruit.
	1	2	3	4	5	6	7	8	9	10	11	12	13
1883													
1884	Apr. 20	May 1	12	May 13	June 4	June 8	35	July 13	Sept. 12	18	Sept. 30		
1885	Apr. 12	May 22	18	May 5	June 1	June 6	30	July 6	Oct. 24	15	Nov. 8		
1886	Apr. 23	May 4	10	May 14	June 5	June 10	32	July 12	Oct. 9	32	Nov. 10		
1887	Apr. 18	Apr. 21	6	Apr. 27	May 22	May 27	31	June 27	Oct. 26	19	Nov. 14	Full.	Good.
1888	Apr. 12	May 1	9	May 10	May 26	May 30	35	July 4	Oct. 26	10	Nov. 5	Full.	Good.
1889	Apr. 18	Apr. 30	9	May 9	June 7	June 10	30	July 10	Nov. 1	9	Nov. 10	Full.	Good.
1890	Apr. 12	Apr. 25	12	May 7	May 28	May 31	38	July 8	Oct. 8	17	Oct. 25	Full.	Good.
1891	Apr. 11	Apr. 24	5	Apr. 29	June 3	June 6	24	June 30	Oct. 24	12	Nov. 5	Full.	Good.
1892													
1893	Apr. 14	Apr. 22	6	Apr. 28	May 31	June 3	29	July 2	Oct. 23	23	Nov. 15	Full.	Good.
1894	Apr. 8	Apr. 30	14	May 14	June 9	June 9	31	July 10	Oct. 30	8	Nov. 8	Scant.	Poor.
1895	Apr. 11	Apr. 18	23	May 16	June 3	June 7	28	July 5	Oct. 27	12	Nov. 8	Scant.	Poor.
1896	Mar. 22	Apr. 25	8	May 3	May 18	May 22	39	June 30	Oct. 10	10	Oct. 20	Scant.	Poor.
1897	Apr. 20	Apr. 28	7	May 5	May 28	June 2	30	July 2	Oct. 22	8	Oct. 30	Scant.	Good.
1898	Apr. 15	Apr. 20	10	Apr. 30	May 19	May 22	30	June 21	Oct. 19	17	Nov. 5	Full.	Good.
1899	Apr. 7	Apr. 18	10	Apr. 28	June 3	June 7	34	July 11	Oct. 2	16	Oct. 18	Full.	Good.
1900	Apr. 16	Apr. 24	10	May 4	June 1	June 5	29	July 4					
1901	Apr. 22	Apr. 28	10	May 8	May 21	May 26	30	June 25					
1902				May 23									
1903					June 3								
1904													
1905													
1906	Apr. 19	May 3	9	May 12	May 28	June 1	32	July 3	Oct. 30	4	Nov. 4	Full.	Good.
1907	Apr. 23	May 6	10	May 16	May 31	June 4	31	July 5					
1908	May 4	May 16	6	May 22	June 16	June 20	28	July 18	Oct. 20	10	Oct. 30	Full.	Good.
1909	Apr. 12	May 2	18	May 20	May 27	June 1	31	July 2	Oct. 18	12	Oct. 30	Full.	Good.
1910	Apr. 28	May 8	10	May 18	June 4	June 8	32	July 10	Oct. 15	15	Oct. 30	Scant.	Good.
1911	Apr. 4	Apr. 15	12	Apr. 27	June 10	June 14	22	July 6					
1912	Apr. 22	May 1	7	May 8	May 27	May 31	39	July 9	Oct. 11	9	Oct. 20	Full.	Good.
Average													
Earliest	Apr. 15	Apr. 27	11	May 8	May 31	June 4	30	July 4	Oct. 18	14	Nov. 1		
Latest	Mar. 22	Apr. 15	5	Apr. 27	May 18	May 22	22	June 21	Sept. 12	5	Sept. 30		
May 4	May 8	28	May 22	June 16	June 20	39	July 18	Nov. 1	32	Nov. 15			

## WILD BLACKBERRY.

1883													
1884	Apr. 20	May 7	5	May 12	June 7	June 10	61	Aug. 10	Sept. 20	20	Oct. 10		
1885	Apr. 27	May 1	5	May 6	May 26	May 30	56	July 25	Oct. 9	11	Oct. 20		
1886	Apr. 24	May 14	11	May 25	May 31	June 5	57	Aug. 1	Oct. 9	16	Oct. 25		
1887	Apr. 13	Apr. 22	3	Apr. 25	May 21	May 27	55	July 21	Oct. 22	21	Nov. 12	Scant.	Fair.
1888	Apr. 25	May 10	6	May 16	May 22	May 27	57	July 23	Sept. 25	25	Oct. 20	Scant.	Good.
1889	Apr. 27	May 10	15	May 25	June 3	June 8	42	July 20	Oct. 10	20	Oct. 30	Scant.	Fair.
1890	Apr. 19	May 8	3	May 11	May 22	May 26	59	July 24	Sept. 25	14	Oct. 9	Scant.	Good.
1891	Apr. 10	May 2	12	May 14	June 2	June 6	44	July 20	Oct. 2	22	Oct. 24	Full.	Good.
1892	Apr. 20	Apr. 27	5	May 2	May 30	June 3	49	July 22	Oct. 13	18	Oct. 31	Full.	Good.
1893	Apr. 29	May 5	9	May 14	June 3	June 6	50	July 26	Oct. 6	17	Oct. 23	Scant.	Poor.
1894	Apr. 16	May 8	12	May 20	June 2	June 5	53	July 28	Oct. 17	13	Oct. 30	Scant.	Poor.
1895	Apr. 20	Apr. 30	7	May 7	May 22	May 25	54	July 18	Sept. 27	19	Oct. 16	Scant.	Good.
1896	Apr. 20	Apr. 30	6	May 6	May 27	May 30	51	July 20	Oct. 22	8	Oct. 30	Full.	Good.
1897	Apr. 15	Apr. 24	8	May 2	May 19	May 23	57	July 30	Oct. 8	16	Oct. 24	None.	None.
1898	Apr. 15	Apr. 28	10	May 8	May 29	June 3	57	July 30	Oct. 8	19	Oct. 27	Full.	Good.
1899	Apr. 17	May 2	6	May 8	May 29	June 4	56	July 30					
1900	Apr. 22	Apr. 27	8	May 5	June 2	June 5	37	July 12					
1901					June 1								
1902													
1903													
1904													
1905													
1906	Apr. 24	May 5	7	May 12	May 30	June 4	46	July 20	Oct. 28	7	Nov. 4	Full.	Good.
1907	Apr. 17	May 5	10	May 15	May 26	May 30	44	July 13					
1908	May 5	May 16	8	May 24	June 16	June 20	32	July 22	Sept. 28	14	Oct. 12	Full.	Good.
1909	Apr. 22	May 2	16	May 18	May 26	May 30	43	July 12	Oct. 22	11	Nov. 2	Full.	Good.
1910	Apr. 28	May 6	9	May 15	June 5	June 10	57	Aug. 6	Oct. 18	12	Oct. 30	Full.	Good.
1911	Apr. 5	Apr. 18	12	Apr. 30	June 8	June 13	32	July 15					
1912	Apr. 25	May 3	12	May 15	May 26	May 30	54	July 23	Oct. 11	7	Oct. 18	Full.	Good.
Average													
Earliest	Apr. 21	May 3	9	May 12	May 29	June 3	50	July 23	Oct. 10	16	Oct. 26		
Latest	Apr. 5	Apr. 18	3	Apr. 25	May 19	May 23	32	July 12	Sept. 20	7	Oct. 9		
May 5	May 16	16	May 25	June 16	June 20	61	Aug. 10	Oct. 28	25	Nov. 22			

## SUPPLEMENT NO. 2.

TABLE 1.—*Phenological observations at Wauseon, Ohio, on 16 different kinds of fruits, 1883 to 1912, inclusive—Continued.*

## CONCORD GRAPE.

Year.	Buds started.	First fully formed leaf.	Days from 2 to 4	In full leaf.	First bloom.	In full bloom.	Days from 6 to 8	Fruit ripe.	Com- plete change in foliage.	Days from 9 to 11	Divested of leaves.	Quantity of fruit.	Quality of fruit.
	1	2	3	4	5	6	7	8	9	10	11	12	13
1883.....	May 10	May 25	14	June 8	June 17	June 20	97	Sept. 25	Oct. 8	12	Oct. 20		
1884.....	May 5	May 15	11	May 26	June 19	June 22	88	Sept. 18	Oct. 24	12	Nov. 5		
1885.....	May 14	May 23	7	May 30	June 16	June 20	95	Sept. 23	Oct. 9	21	Oct. 30		
1886.....	Apr. 22	May 4	18	May 22	June 4	June 9	84	Sept. 1	Oct. 8	24	Nov. 1	Full	Good.
1887.....	May 7	May 17	11	May 28	June 9	June 14	86	Sept. 8	Sept. 25	30	Oct. 25	Full	Good.
1888.....	May 14	May 26	13	June 8	June 16	June 20	84	Sept. 12	Oct. 10	18	Oct. 28	Full	Good.
1889.....	Apr. 27	May 11	7	May 18	June 13	June 17	93	Sept. 18	Sept. 22	11	Oct. 3	Full	Good.
1890.....	Apr. 28	May 17	16	June 2	June 11	June 16	91	Sept. 15	Oct. 2	23	Oct. 25	Full	Good.
1891.....	Apr. 25	May 9	21	May 30	June 14	June 18	104	Sept. 30	Oct. 13	18	Oct. 31	Full	Good.
1892.....	May 5	May 19	20	June 8	June 16	June 20	87	Sept. 15	Oct. 6	19	Oct. 25	Full	Good.
1893.....	May 10	May 19	15	June 3	June 14	June 18	99	Sept. 25	Oct. 16	14	Oct. 30	Full	Good.
1894.....	Apr. 30	May 12	8	May 20	June 11	June 14	93	Sept. 15	Sept. 27	19	Oct. 16	Scant	Fair.
1895.....	May 1	May 9	21	May 30	June 5	June 9	82	Aug. 30	Oct. 11	16	Oct. 22	Scant	Good.
1896.....	Apr. 19	Apr. 30	10	May 10	June 19	June 24	73	Sept. 5	Oct. 2	12	Oct. 14	Full	Good.
1897.....	May 7	May 14	18	June 1	June 18	June 22	None...	Oct. 18	21	Nov. 8	None		None.
1898.....	Apr. 30	May 10	9	May 19	June 10	June 14	94	Sept. 16					
1899.....	Apr. 28	May 2	9	May 11	May 24	May 29	114	Sept. 20					
1900.....													
1901.....													
1902.....													
1903.....													
1904.....		May 22	11	June 2	June 18	June 25	86	Sept. 20					
1905.....	Apr. 30	May 18	17	June 4	June 14	June 18	85	Sept. 12	Sept. 20	44	Nov. 4	Not many	Good.
1906.....	Apr. 29	May 10	20	May 30	June 9	June 13	94	Sept. 15				Full	Good.
1907.....	May 16	June 4	8	June 12	June 24	June 28	84	Sept. 20	Sept. 27	15	Oct. 12	Mod.	Good.
1908.....	May 8	May 20	6	May 26	June 6	June 11	99	Sept. 18	Oct. 25	11	Nov. 5	Full	Good.
1909.....	May 15	May 24	10	June 3	June 16	June 21	91	Sept. 20	Oct. 18	12	Oct. 30	Full	Good.
1910.....	May 4	May 21	14	June 4	June 15	June 19	89	Sept. 16				Not full	Good.
1911.....		May 8	14	May 22	June 22	June 26	71	Sept. 5	Oct. 12	18	Oct. 30	Full	Good.
1912.....	May 6	May 18	12	May 30	June 11	June 16	90	Sept. 14	Oct. 11	18	Oct. 28	Full	Good.
Average.....	May 4	May 16	13	May 29	June 13	June 17	90	Sept. 15	Oct. 8	18	Oct. 26		
Earliest.....	Apr. 19	Apr. 30	6	May 10	May 24	May 29	73	Aug. 30	Sept. 22	11	Oct. 3		
Latest.....	May 16	June 4	21	June 12	June 24	June 28	114	Sept. 30	Oct. 25	44	Nov. 8		

## WILD FROST GRAPE.

1883.....	May 10	May 23	16	June 8	June 9	June 13	83	Sept. 30	Sept. 18	22	Oct. 10		
1884.....	May 5	May 15	10	May 25	June 5	June 8	None...	Oct. 24	12	Nov. 5			
1885.....	May 3	May 17	10	May 27	June 5	June 8	109	Sept. 25	Oct. 9	14	Oct. 23		
1886.....	Apr. 20	May 5	17	May 22	May 23	May 27	117	Sept. 24	Sept. 25	20	Oct. 15	Scant	Fair.
1887.....	May 7	May 18	10	May 28	June 4	June 8	93	Sept. 10	Sept. 25	5	Sept. 30	Full	Good.
1888.....	May 9	May 25	11	June 5	June 12	June 15	101	Sept. 25	Oct. 10	16	Oct. 26	Full	Good.
1889.....	Apr. 27	May 10	7	May 17	May 23	June 1	111	Sept. 20	Sept. 25	8	Oct. 3	Scant	Fair.
1890.....	Apr. 28	May 16	17	June 2	June 5	June 8	114	Sept. 30	Sept. 30	20	Oct. 20	Full	Good.
1891.....	Apr. 29	May 8	22	May 30	May 16	May 19	135	Oct. 1	Oct. 13	18	Oct. 31	Scant	Fair.
1892.....	May 5	May 17	19	June 5	June 14	June 17	85	Sept. 10	Oct. 6	18	Oct. 24	Full	Good.
1893.....	May 9	May 18	14	June 1	June 2	June 6	121	Oct. 5	Oct. 17	13	Oct. 30	Full	Good.
1894.....	Apr. 29	May 9	9	May 18	May 26	May 31	122	Sept. 30	Sept. 27	19	Oct. 16	Scant	Good.
1895.....	Apr. 30	May 6	22	May 28	June 3	June 7	125	Oct. 10	Oct. 11	11	Oct. 22	Full	Good.
1896.....	Apr. 20	Apr. 27	11	May 8	May 17	May 22	80	Aug. 10	Oct. 2	10	Oct. 12	Full	Good.
1897.....	May 5	May 11	19	May 30	June 10	June 14	77	Aug. 30	Oct. 10	15	Oct. 25	Full	Good.
1898.....	Apr. 30	May 8	9	May 17	June 6	June 10	112	Sept. 30					
1899.....	Apr. 29	May 3	11	May 14	May 23	May 27							
1900.....													
1901.....													
1902.....													
1903.....													
1904.....													
1905.....													
1906.....													
1907.....													
1908.....													
1909.....													
1910.....													
1911.....													
1912.....	May 7	May 15	14	May 29	June 4	June 7	105	Sept. 20	Oct. 11	9	Oct. 20	Full	Good.
Average.....	May 1	May 12	14	May 26	June 1	June 5	106	Sept. 19	Oct. 5	15	Oct. 20		
Earliest.....	Apr. 20	Apr. 27	9	May 8	May 10	May 19	77	Aug. 10	Sept. 18	5	Oct. 3		
Latest.....	May 10	May 25	22	June 8	June 14	June 17	135	Oct. 10	Oct. 24	22	Nov. 5		

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 1.—*Phenological observations at Wauseon, Ohio, on 16 different kinds of fruits, 1883 to 1912, inclusive—Continued.*

## BLACK HUCKLEBERRY.

Year.	Buds started.	First fully formed leaf.	Days from 2 to 4	In full leaf.	First bloom.	In full bloom.	Days from 6 to 8	Fruit ripe.	Complete change in foliage.	Days from 9 to 11	Divested of leaves.	Quantity of fruit.	Quality of fruit.
	1	2	3	4	5	6	7	8	9	10	11	12	13
1883													
1884	May 13	May 21	6	May 27	May 30	June 3			Sept. 20	25	Oct. 15		
1885	May 1	May 16	8	May 24	May 20	May 25			Sept. 20	35	Oct. 25		
1886													
1887	May 6	May 10	11	May 21	May 20	May 25	51	July 15	Sept. 30	25	Oct. 25	Full	Good.
1888													
1889	May 9	May 12	4	May 16	May 14	May 19	66	July 24	Sept. 25	30	Oct. 25	Full	Good.
1890	May 10	May 18	7	May 25	May 18	May 23	58	July 20	Oct. 1	17	Oct. 18	Full	Good.
1891													
1892	Apr. 21	May 1	12	May 13	May 5	May 9	68	July 16	Sept. 28	17	Oct. 15	Full	Good.
1893							60	July 28				Full	Good.
1894													
1895													
1896													
1897	Apr. 18	Apr. 25	10	May 5	May 6	May 10	69	July 8	Oct. 2	12	Oct. 14	Full	Good.
1898	May 3	May 12	10	May 22	May 15	May 20	59	July 18	Oct. 2	16	Oct. 18	Full	Good.
1899													
1900													
1901													
1902													
1903													
1904													
1905													
1906													
1907	Apr. 24	May 3	8	May 23	May 18	May 22	58	July 19				Not full	Good.
1908							61	July 20	Oct. 10	12	Oct. 22	Full	Good.
1909							54	July 18				Scant	Good.
1910							62	Aug. 4				Not full	Good.
1911							73	Aug. 1	Oct. 25			Full	Good.
1912							57	July 21				Scant	Fair.
Average.												None	
Earliest.	May 2	May 13	9	May 22	May 18	May 23	60	July 21	Oct. 2	18	Oct. 20		
Latest.	Apr. 18	Apr. 5	4	May 5	May 5	May 9	51	July 8	Oct. 20	12	Oct. 14		
	May 13	May 30	13	June 10	May 30	June 6	73	Aug. 4	Oct. 10	35	Oct. 25		

## BLUE HUCKLEBERRY.

1883													
1884													
1885													
1886													
1887													
1888	May 5	May 11	11	May 22	May 19	May 24	55	July 18	Sept. 25	30	Oct. 25	Full	Good.
1889													
1890	Apr. 28	May 8	5	May 13	May 13	May 17	70	July 26	Sept. 25	35	Oct. 30	Full	Good.
1891							64	July 19	Oct. 1	17	Oct. 18	Full	Good.
1892	Apr. 22	May 1	13	May 14	May 4	May 23	69	July 16	Sept. 30	15	Oct. 15	Full	Good.
1893							62	July 28				Full	Good.
1894													
1895													
1896													
1897	Apr. 19	Apr. 25	10	May 6	May 5	May 9	54	July 2	Oct. 2	13	Oct. 15	Full	Good.
1898	May 3	May 13	9	May 22	May 15	May 19	62	July 20	Oct. 2	14	Oct. 16	Full	Good.
1899													
1900													
1901													
1902													
1903													
1904													
1905													
1906	Apr. 25	May 2	12	May 14	May 14	May 19	64	July 22	Oct. 10	8	Oct. 18	Full	Good.
1907	May 8	May 17	9	May 26	May 22	May 26	55	July 20				Scant	Fair.
1908							60					Scant	Good.
1909							72	Aug. 2	Oct. 28			Full	Good.
1910							58	July 20				Scant	Fair.
1911												None	
1912												Full	Good.
Average.												Full	Good.
Earliest.	Apr. 30	May 11	9	May 20	May 16	May 20	60	July 19	Oct. 1	19	Oct. 20		
Latest.	Apr. 19	Apr. 25	5	May 5	May 4	May 8	54	July 2	Sept. 25	8	Oct. 15		
	May 8	May 31	13	June 10	May 30	June 3	72	Aug. 2	Oct. 28	35	Oct. 30		

## SUPPLEMENT NO. 2.

TABLE 1.—*Phenological observations at Wauseon, Ohio, on 16 different kinds of fruits, 1883 to 1912, inclusive—Concluded.*

## WILD STRAWBERRY.

Year.	Buds started.	First fully formed leaf.	Days from 2 to 4	In full leaf.	First bloom.	In full bloom.	Days from 6 to 8	Fruit ripe.	Complete change in foliage.	Days from 9 to 11	Divested of leaves.	Quantity of fruit.	* Quality of fruit.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	
1883.....														
1884.....														
1885.....					May 1	May 3	May 8	32	June 9					
1886.....					Apr. 14	Apr. 24	Apr. 29	26	May 25					
1887.....						May 3	May 7	30	June 6				Good.	
1888.....						May 4	May 8	37	June 14				Good.	
1889.....						May 8	May 13	27	June 9				Good.	
1890.....						May 11	May 15	26	June 10				Good.	
1891.....							Apr. 28	May 2	31	June 2				Good.
1892.....							May 4	May 8	35	June 12				Fair.
1893.....							May 9	May 12	27	June 8				Good.
1894.....							Apr. 27	May 2	33	June 4				Good.
1895.....							May 1	May 5	30	June 4				Good.
1896.....							Apr. 29	May 4	15	May 19				Good.
1897.....							May 11	May 15	29	June 13				Scant.
1898.....							May 1	May 6	23	May 29				Scant.
1899.....							May 3	May 7	26	June 2				Fair.
1900.....														
1901.....							May 2							
1902.....														
1903.....														
1904.....														
1905.....														
1906.....														
1907.....														
1908.....														
1909.....							May 15	May 19	27	June 15				Good.
1910.....							Apr. 11	Apr. 15	62	June 16				Good.
1911.....														
1912.....							May 6	May 16	23	June 8				Good.
Average.....							May 2	May 7	30	June 6				
Earliest.....							Apr. 11	Apr. 15	23	May 19				
Latest.....							May 15	May 19	62	June 16				

## TAME STRAWBERRY.

1883.....					May 1	May 5	May 12	36	June 17				
1884.....					May 5	May 13	May 16	25	June 10				
1885.....					Apr. 17	Apr. 28	May 3	26	May 29				
1886.....						May 7	May 10	32	June 11				Good.
1887.....						May 11	May 16	30	June 15				Fair.
1888.....						May 9	May 12	30	June 11				Good.
1889.....						May 13	May 16	27	June 12				Good.
1890.....													
1891.....						May 6	May 9	28	June 6				Good.
1892.....						May 7	May 11	35	June 15				Good.
1893.....						May 11	May 14	30	June 13				Good.
1894.....						Apr. 28	May 2	36	June 7				Good.
1895.....						May 3	May 7	30	June 6				Good.
1896.....						May 2	May 6	15	May 21				Good.
1897.....						May 9	May 13	30	June 12				Good.
1898.....						May 4	May 9	24	June 2				Good.
1899.....						May 5	May 9	26	June 4				Good.
1900.....													
1901.....						May 3							
1902.....													
1903.....													
1904.....						May 4	May 12	27	June 8				Good.
1905.....						Apr. 26	Apr. 30	31	May 31				Good.
1906.....						Apr. 29	May 6	29	June 4				Good.
1907.....						May 3	May 8	43	June 20				Good.
1908.....						Apr. 24	Apr. 28	37	June 4				Good.
1909.....						May 12	May 17	28	June 14				Good.
1910.....						Apr. 11	Apr. 16	50	June 5				Good.
1911.....													
1912.....													
Average.....						May 4	May 8	31	June 8				
Earliest.....						Apr. 11	Apr. 16	15	May 21				
Latest.....						May 13	May 17	50	June 20				

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 2.—*Phenological observations at Wauseon, Ohio, on 20 different field and garden crops, 1883 to 1912, inclusive.*

Year.	Planted.	Days from 1 to 3.	Above ground.	In blossom.	Ripe.	Ready for use.	Days from 3 to 7.	Per cent of a good crop.	Quality of crop.	Year.	Planted.	Days from 1 to 3.	Above ground.	In blossom.	Ripe.	Ready for use.	Days from 3 to 7.	Per cent of a good crop.	Quality of crop.
1	Planted.									1	Planted.								
2		Days from 1 to 3.								2		Days from 1 to 3.							
3			Above ground.							3			Above ground.						
4				In blossom.						4				In blossom.					
5					Days from 4 to 6.					5					Days from 4 to 6.				
6						Ripe.				6					Ripe.				
7							Ready for use.			7						Ready for use.			
8								Days from 3 to 7.		8							Days from 3 to 7.		
9									Per cent of a good crop.	9								Per cent of a good crop.	
10									Quality of crop.	10									Quality of crop.

## WHEAT.

1883	Sept. 14	8	Sept. 22	June 12	32	July 14	July 14	295	90	Fair.
1884	Sept. 24	6	Sept. 30	June 11	25	July 6	July 6	280	85	Good.
1885	Sept. 9	19	Sept. 28	June 10	30	July 10	July 10	286	50	Good.
1886	Sept. 16	6	Sept. 22	June 1	30	July 1	July 1	289	60	Fair.
1887	Sept. 22	4	Sept. 26	June 1	27	June 28	June 28	280	40	Good.
1888	Sept. 14	7	Sept. 21	June 16	24	July 10	July 10	294	85	Good.
1889	Sept. 19	16	Oct. 5	June 11	32	July 13	July 13	298	60	Good.
1890	Sept. 19	16	Oct. 5	June 10	25	July 5	July 5	274	40	Good.
1891	Sept. 17	8	Sept. 25	June 6	26	July 2	July 2	281	90	Good.
1892	Sept. 7	6	Sept. 13	June 10	28	July 8	July 8	299	70	Good.
1893	Sept. 17	5	Sept. 22	June 6	29	July 5	July 5	287	80	Good.
1894	Sept. 29	7	Oct. 6	June 6	25	July 1	July 1	269	50	Fair.
1895	Sept. 12	5	Sept. 17	June 3	25	June 28	June 28	285	90	Good.
1896	Sept. 23	7	Sept. 30	May 24	30	June 23	June 23	267	50	Fair.
1897	Sept. 18	8	Sept. 26	June 16	23	July 9	July 9	287	80	Good.
1898	Oct. 2	12	Oct. 14	June 6	25	July 1	July 1	261	...	Failure.
1899	Sept. 17	6	Sept. 23	June 10	24	July 4	July 4	285	3	Failure.
1900	Oct. 2	6	Oct. 8	June 16	13	June 29	June 29	265	...	Failure.
1901	*Oct. 19	10	Oct. 29	.....	.....	July 6	July 6	.....	40	Good.
1902	.....	.....	.....	.....	.....	July 9	July 9	.....	.....	.....
1903	.....	.....	.....	.....	.....	July 6	July 6	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	Sept. 24	9	Oct. 3	June 15	17	July 2	July 2	275	85	Good.
1906	Sept. 12	10	Sept. 22	June 5	27	July 2	July 2	284	75	Good.
1907	.....	.....	.....	June 20	26	July 16	July 16	281	90	Good.
1908	.....	.....	.....	June 2	25	June 27	June 27	281	90	Good.
1909	Sept. 15	5	Sept. 20	June 12	25	July 7	July 7	276	90	Good.
1910	Sept. 20	15	Oct. 5	June 21	20	July 11	July 11	280	85	Good.
1911	Sept. 20	10	Sept. 30	June 1	24	June 25	June 25	268	90	Good.
1912	Sept. 20	9	Sept. 29	June 14	28	July 12	July 12	296	5	Fair.
Average	Sept. 20	9	Sept. 29	June 9	26	July 5	July 5	270	67	.....
Earliest	Sept. 7	4	Sept. 13	May 24	13	June 23	June 23	261	...	.....
Latest	*Oct. 19	19	Oct. 29	June 21	32	July 16	July 16	299	...	.....

CORN.

OATS.

### POTATOES (early).

1883	Apr.	12	26	May	8	June	10	71	Aug.	20	June	30	53	....
1884	Apr.	21	23	May	14	June	18	42	July	30	July	2	50	....
1885	Apr.	23	26	May	19	June	25	36	July	31	July	9	51	....
1886	Apr.	22	17	May	9	June	12	38	July	20	June	24	46	85
1887	Apr.	26	15	May	11	June	18	37	July	25	June	30	50	100
1888	Apr.	23	25	May	18	June	20	47	Aug.	8	July	10	53	70
1889	Apr.	22	19	May	11	June	21	55	Aug.	15	June	27	47	95
1890	Apr.	25	18	May	13	June	14	44	July	28	June	22	40	50
														Fair.
1891	Apr.	24	17	May	11	June	17	51	Aug.	7	June	29	49	95
1892	Apr.	28	16	May	14	June	20	56	Aug.	15	July	1	48	90
1893	Apr.	24	21	May	15	June	16	46	Aug.	1	July	5	51	60
1894	Apr.	17	14	May	1	June	8	54	Aug.	1	June	25	55	60
1895	Apr.	27	10	May	7	June	17	64	Aug.	20	July	10	64	60
1896	May	1	11	May	12	June	14	55	Aug.	8	June	19	38	100
1897	May	6	14	May	20	June	25	33	July	28	July	10	51	60
1898	May	21	9	May	30	June	29	52	Aug.	20	July	30	61	....
1899	Apr.	25	11	May	6	June	10	56	Aug.	5	June	20	45	80
1900	Apr.	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	Apr.	17	.....	.....	.....	June	20	.....	.....	.....	.....	.....	.....	.....
1902	Apr.	21	.....	.....	.....	June	8	.....	.....	.....	June	23	.....	.....
1903	.....	.....	.....	.....	.....	May	28	.....	.....	.....	.....	.....	.....	.....
1904	May	5	12	May	17	June	20	83	Sept.	12	.....	.....	75	....
1905	May	4	6	May	10	June	6	80	Aug.	25	June	27	48	80
1906	Apr.	24	16	May	10	June	11	82	Sept.	1	July	3	54	80
1907	May	4	10	May	14	June	18	63	Aug.	20	July	7	54	45
1908	Apr.	22	18	May	10	June	8	54	Aug.	1	July	12	63	50
1909	May	5	7	May	12	June	8	58	Aug.	5	July	3	52	60
1910.	Apr.	8	30	May	8	June	18	63	Aug.	20	July	10	63	85
1911	May	4	21	May	25	June	24	34	July	28	July	8	44	40
1912	Apr.	16	23	May	9	June	16	39	July	25	June	28	50	75
Average	Apr.	26	17	May	13	June	15	55	Aug.	9	July	2	50	72
Earliest	Apr.	8	6	May	1	May	28	33	July	20	June	19	38	....
Latest	May	21	30	May	30	June	29	83	Sept.	12	July	30	64	....

\* Ground very dry and hard; made late sowing.

<sup>†</sup> Corn was poor till August, and then came on well and made good crop.

## SUPPLEMENT NO. 2.

TABLE 2.—*Phenological observations at Wauseon, Ohio, on 20 different field and garden crops, 1883 to 1912, inclusive—Continued.*

Year.	POTATOES (Late.)										LATE BEANS (Lima).										
	Planted. 1	Days from 1 to 8. 2	Above ground. 3	In blossom. 4	Days from 4 to 6. 5	Ripe. 6	Ready for use. 7	Days from 8 to 7. 8	Per cent of a good crop. 9	Quality of crop. 10	Year.	Planted. 1	Days from 1 to 8. 2	Above ground. 3	In blossom. 4	Days from 4 to 6. 5	Ripe. 6	Ready for use. 7	Days from 8 to 7. 8	Per cent of a good crop. 9	Quality of crop. 10
1883..	May 12	18	May 30	June 30	66	Sept. 5	July 26	57	....		1883..	May 5	15	May 20	July 16	45	Aug. 30	July 31	69	....	
1884..	May 20	12	June 1	July 4	59	Sept. 1	July 20	49	....		1884..	May 10	13	May 23	June 25	60	Aug. 24	July 31	69	....	
1885..	May 25	12	June 6	July 14	68	Sept. 20	July 28	52	....		1885..	June 1	8	June 9	July 13	69	Sept. 20	Aug. 18	70	....	Poor.
1886..	May 11	15	May 26	June 27	53	Aug. 20	July 12	47	90	Good.	1886..	May 14	12	May 26	July 5	51	Aug. 25	Aug. 3	69	50	Failure.
1887..	June 4	8	June 12	July 20	41	Aug. 30	Aug. 6	55	20	Fair.	1887..	May 21	12	June 2	July 7	....					Failure.
1888..	May 21	12	June 2	July 6	66	Sept. 10	July 28	56	75	Good.	1888..	May 5	6	May 11	Moles.	....					Fair.
1889..	May 17	11	May 28	July 1	62	Sept. 1	July 18	51	95	Good.	1889..	May 22	22	June 13	July 15	72	Sept. 15	Aug. 12	60	50	Good.
1890..	May 28	7	June 4	July 10	47	Aug. 26	July 20	51	40	Fair.	1890..	May 16	13	May 29	July 2	49	Aug. 20	July 30	62	50	Good.
1891..	May 8	10	May 18	June 28	53	Aug. 20	July 20	58	90	Good.	1891..	May 8	13	May 21	June 26	68	Sept. 2	Aug. 8	79	80	Good.
1892..	June 29	8	July 7	Aug. 20	41	Sept. 30	Sept. 1	56	60	Fair.	1892..	Apr. 28	18	May 16	June 27	49	Aug. 15	Aug. 8	84	50	Good.
1893..	May 15	17	June 1	June 30	80	Sept. 18	July 27	56	60	Good.	1893..	May 15	17	June 1	June 29	57	Aug. 25	Aug. 15	75	50	Good.
1894..	May 2	17	May 19	June 27	95	Sept. 30	July 24	66	60	Good.	1894..	Apr. 18	16	May 4	June 20	61	Aug. 20	Aug. 1	89	25	Good.
1895..	Apr. 30	18	May 18	June 28	61	Aug. 28	July 27	70	60	Good.	1895..	Apr. 27	12	May 9	July 15	36	Aug. 20	Aug. 5	88	30	Good.
1896..	May 12	12	May 24	June 25	79	Sept. 12	July 25	62	*30	Fair.	1896..	May 1	9	May 10	June 23	48	Aug. 10	July 27	78	80	Good.
1897..	June 1	14	June 15	Aug. 2	49	Sept. 20	Aug. 25	71	80	Good.	1897..	May 19	14	June 2	July 6	56	Aug. 31	Aug. 16	75	80	Good.
1898..	May 21	11	June 1	July 8	64	Sept. 10	Aug. 20	80	....		1898..	May 25	9	June 4	July 14	60	Sept. 12	Aug. 25	82	....	
1899..	June 3	6	June 9	July 14	56	Sept. 8	Aug. 8	60	85	Good.	1899..	May 16	9	May 25	July 5	56	Aug. 30	Aug. 6	73	60	Good.
1900..											1900..	May 1	12	May 13							
1901..	May 16										1901..										
1902..											1902..										
1903..							Sept. 16				1903..										
1904..											1904..	Apr. 22									
1905..											1905..	May 9	10	May 19	July 6	66	Sept. 10	Aug. 5	78	60	Good.
1906..	May 26	8	June 3	July 3	74	Sept. 15	Aug. 12	70	80	Good.	1906..	May 12	12	May 24	June 29	52	Aug. 20	July 24	61	....	
1907..	May 4	15	May 19	July 6	61	Sept. 5	Aug. 10	83	40	Good.	1907..	May 6	10	May 16	July 10	58	Sept. 6	Aug. 25	101	70	Good.
1908..											1908..	Apr. 23	25	May 18	July 3	69	Sept. 10	Aug. 25	99	80	Good.
1909..	May 5	10	May 15	June 20	61	Aug. 20	July 9	55	75	Good.	1909..	May 13	14	May 27	July 20	57	Sept. 15	Aug. 23	88	80	Good.
1910..											1910..	May 10	14	May 24	July 17	63	Sept. 18	Aug. 24	92	60	Good.
1911..											1911..	May 4	14	May 18	June 19	57	Aug. 14	Aug. 1	75	80	Good.
1912..	May 23	12	June 4	July 1	91	Sept. 30	Aug. 26	83	85	Good.	1912..	Apr. 24	14	May 10	June 29	56	Aug. 24	July 30	82	75	Good.
Aver- age.	May 19	12	May 31	July 7	63	Sept. 8	Aug. 3	64	66		Aver- age.	May 8	14	May 22	July 3	58	Aug. 30	Aug. 8	78	60	
Earli- est.	Apr. 30	7	May 15	June 25	41	Aug. 20	July 9	46	....		Earli- est.	Apr. 18	6	May 4	June 20	36	Aug. 10	July 24	60	....	
Latest	June 29	18	July 7	Aug. 20	95	Sept. 30	Sept. 16	83	....		Latest	June 1	25	June 13	July 20	69	Sept. 25	Aug. 25	101	....	

### **EARLY BEANS (Golden Wax).**

1883	Apr.	21	11	May	2	June	20	63	Aug.	22	July	6	65	....	1883	Apr.	20	8	Apr.	28	June	8	13	July	21	June	29	62	....	
1884	Apr.	24	16	May	10	June	15	45	July	30	June	27	48	....	1884	Apr.	24	12	May	6	June	5	40	July	15	June	24	49	....	
1885	May	14	8	May	22	June	23	50	Aug.	12	July	8	47	....	1885	May	14	8	May	12	June	15	33	July	18	July	6	45	Good.	
1886	Apr.	21	9	Apr.	30	June	8	37	July	15	June	21	52	90	Good.	1886	Apr.	21	7	Apr.	28	May	30	37	July	6	June	18	51	90
1887	Apr.	28	13	May	11	June	9	43	July	22	June	24	44	100	Good.	1887	Apr.	28	9	May	7	June	3	35	July	8	June	18	42	100
1888	Apr.	23	16	May	9	June	17	52	Aug.	8	July	6	58	60	Good.	1888	Apr.	23	16	May	9	June	15	45	July	20	July	3	55	75
1889	Apr.	27	14	May	11	June	21	45	Aug.	5	July	5	54	100	Good.	1889	Apr.	13	12	Apr.	25	May	27	42	July	8	June	26	62	95
1890	Apr.	24	20	May	14	June	16	38	July	24	July	2	49	100	Good.	1890	Apr.	24	13	May	7	June	6	33	July	9	June	20	44	90
1891	Apr.	24	13	May	7	June	17	33	July	20	June	27	51	100	Good.	1891	Apr.	24	12	May	6	June	6	30	July	6	June	22	47	80
1892	Apr.	28	11	May	9	June	18	40	July	28	July	1	53	65	Good.	1892	Apr.	28	9	May	7	June	10	38	July	15	June	25	49	50
1893	Apr.	28	17	May	15	June	20	40	July	30	July	4	50	90	Good.	1893	Apr.	28	12	May	10	June	10	35	July	15	June	26	47	50
1894	Apr.	18	13	May	1	June	12	33	July	15	July	2	62	90	Good.	1894	Apr.	18	12	Apr.	30	June	3	33	July	8	June	19	50	40
1895	Apr.	27	9	May	6	June	18	37	July	25	July	10	65	40	Good.	1895	Apr.	27	10	May	7	June	12	33	July	15	June	24	48	30
1896	May	1	6	May	7	June	16	42	July	28	June	26	40	100	Good.	1896	May	1	6	May	7	June	7	34	July	5	June	18	42	80
1897	May	6	10	May	16	June	22	24	July	6	July	6	51	100	Good.	1897	May	6	9	May	15	June	19	27	July	10	June	30	46	70
1898	Apr.	27	15	May	12	June	16	34	July	20	June	27	46	....	Good.	1898	Apr.	27	9	May	6	May	30	33	July	1	June	14	39	....
1899	Apr.	25	6	May	1	June	7	37	July	14	June	19	49	100	Good.	1899	Apr.	25	7	May	2	June	3	42	July	14	June	18	47	50
1900	May	1	12	May	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	1900	May	1	15	May	16	.....	.....	.....	.....	.....	.....	.....	.....	Good.	
1901	.....	.....	.....	.....	.....	June	20	.....	.....	.....	July	11	.....	.....	1901	.....	.....	.....	.....	.....	June	15	.....	.....	.....	.....	.....	.....	.....	
1902	Apr.	21	.....	.....	.....	.....	.....	.....	.....	.....	June	27	.....	.....	1902	Apr.	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1903	Apr.	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1903	Apr.	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1904	Apr.	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1904	Apr.	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1905	Apr.	29	10	May	9	June	10	40	July	20	June	28	50	70	Good.	1905	Apr.	29	10	May	9	June	6	54	July	20	June	26	48	50
1906	Apr.	27	15	May	12	June	18	32	July	20	July	2	51	....	Good.	1906	Apr.	24	11	May	5	June	4	36	July	10	June	27	53	....
1907	May	6	10	May	16	June	28	27	July	25	July	5	50	70	Good.	1907	May	6	12	May	18	June	20	35	July	25	July	5	48	80
1908	Apr.	23	25	May	18	June	13	37	July	20	July	1	44	90	Good.	1908	Apr.	23	17	May	10	June	2	32	July	4	June	22	43	60
1909	May	13	11	May	24	June	24	46	Aug.	10	July	6	43	75	Good.	1909	May	8	9	May	17	June	13	37	July	20	July	3	47	50
1910	May	9	12	May	21	June	15	62	Aug.	16	July	10	50	75	Good.	1910	Apr.	14	21	May	5	June	15	40	July	25	July	1	57	50
1911	May	4	11	May	15	June	11	44	July	25	June	26	42	80	Good.	1911	May	4	8	May	12	June	2	31	July	3	June	19	38	60
1912	Apr.	24	14	May	8	June	12	43	July	25	June	25	48	100	Good.	1912	Apr.	24	13	May	7	May	30	49	July	18	June	24	48	90
Average.	Apr.	28	13	May	11	June	17	40	July	27	July	1	50	85	....	Average.	Apr.	26	11	May	7	June	7	37	July	14	June	25	49	67
Earliest.	Apr.	18	6	Apr.	30	June	7	18	July	14	June	19	40	....	....	Earliest.	Apr.	13	6	Apr.	25	May	27	21	July	1	June	14	38	....
Latest	May	14	25	May	24	June	28	63	Aug.	22	July	10	65	....	....	Latest	May	14	21	May	22	June	20	54	July	30	July	6	62	....

\*High water killed about two-thirds of crop.

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 2.—*Phenological observations at Wauseon, Ohio, on 20 different field and garden crops, 1883 to 1912, inclusive—Continued.*

<b>Year.</b>	<b>Planted.</b>	<b>Days from 1 to 3.</b>	<b>Above ground.</b>	<b>In blossom.</b>	<b>Days from 4 to 6.</b>	<b>Ripe.</b>	<b>Ready for use.</b>	<b>Days from 8 to 7.</b>	<b>Per cent of a good crop.</b>	<b>Quality of crop.</b>
1	Planted.									
2		Days from 1 to 3.								
3			Above ground.							
4				In blossom.						
5					Days from 4 to 6.					
6						Ripe.				
7							Ready for use.			
8								Days from 8 to 7.		
9									Per cent of a good crop.	
10										Quality of crop.

## LATE PEAS.

1883												
1884												
1885	June 1	9	June 10	July 13	39	Aug. 21	Aug. 13	64	..			
1886	Apr. 21	9	Apr. 30	June 11	36	July 17	July 4	65	60			Good.
1887	May 21	12	June 2	July 4	37	Aug. 10	July 25	53	40			Good.
1888												
1889	May 13	13	May 26	June 17	31	July 18	July 5	40	60			
1890	May 16	10	May 26	June 25	40	Aug. 4	July 12	47	50			Good.
1891												
1892												
1893	Apr. 28	13	May 11	June 16	39	July 25	June 30	50	50			Good.
1894												
1895												
1896												
1897	May 19	11	May 30	July 5	25	July 30	July 16	47	40			Good.
1898	May 25	10	June 4	July 12	29	Aug. 10	July 25	51	..			
1899	May 29	7	June 6	June 30	32	Aug. 1	July 14	38	40			Good.
1900												
1901												
1902												
1903												
1904												
1905	Apr. 29	10	May 9	June 18	58	Aug. 15	July 14	66	60			Good.
1906												
1907	May 6	11	May 17	June 27	44	Aug. 10	July 15	59	75			
1908	Apr. 23	20	May 13	June 19	41	July 30	July 1	49	5			Good.
1909												Good.
1910												
1911												
1912												
Aver- age	May 12	11	May 23	June 26	37	Aug. 3	July 14	52	48			
Earliest	Apr. 21	7	Apr. 30	June 11	25	July 17	June 30	38	..			
Latest	June 1	20	June 10	July 12	58	Aug. 21	Aug. 13	66	..			

## CABBAGE (Winnigstadt).

1883.	Apr. 21	9	Apr. 10				Aug. 21	113	...	
1884.	Apr. 24	9	May 3				Aug. 6	95	...	
1885.	May 14	7	May 21				Sept. 10	112	...	
1886.	Apr. 20	6	Apr. 26				Aug. 8	104	85	Good.
1887.	Apr. 30	7	May 7				Sept. 15	131	40	Good.
1888.	Apr. 5	30	May 5				Sept. 8	126	80	Good.
1889.	Apr. 27	13	May 10				Aug. 25	107	90	Good.
1890.	Apr. 24	9	May 3				Aug. 25	114	80	Good.
1891.	Apr. 25	16	May 11				Sept. 1	113	50	Good.
1892.	Apr. 28	11	May 9				Aug. 20	103	90	Good.
1893.	Apr. 17	15	May 2				Aug. 30	120	40	Fair.
1894.	Apr. 18	11	May 29				Aug. 14	107	75	Good.
1895.	Apr. 27	9	May 6				Sept. 20	137	40	Good.
1896.	May 1	7	May 8				Aug. 26	110	65	Good.
1897.	May 6	5	May 11				Sept. 20	137	60	Good.
1898.	Apr. 27	7	May 4				Aug. 25	113	...	
1899.	Apr. 25	6	May 1				Aug. 10	101	60	Good.
1900.	May 1	15	May 16				...	...	...	
1901.										
1902.	Apr. 15									
1903.										
1904.										
1905.	Apr. 27	9	May 6				Sept. 20	133	65	Good.
1906.	Apr. 13	7	Apr. 20				Sept. 1	110	50	Good.
1907.	May 6	8	May 14				Sept. 20	137	20	Fair.
1908.	Apr. 23	13	May 6				Aug. 15	95	80	Good.
1909.	May 1	11	May 12				Aug. 20	115	80	Good.
1910.	Apr. 11	16	Apr. 27				...	...	...	
1911.	May 4	11	May 15				Aug. 12	89	60	Good.
1912.	Apr. 24	18	May 12				Aug. 30	110	75	Good.
Average.	Apr. 24	11	May 5				Aug. 28	115	64	
Earliest.	Apr. 5	5	Apr. 20				Aug. 6	89	...	
Latest.	May 14	30	May 21				Sept. 20	137	...	

### **BEETS** (Early Blood Turnip).

### **EARLY RADISH.**

TABLE 2.—*Phenological observations at Wauseon, Ohio, on 20 different field and garden crops, 1883 to 1912, inclusive—Continued.*

Year.	1	Planted.	2	Days from 1 to 8.	3	Above ground.	4	In blossom.	5	Days from 4 to 6.	6	Ripe.	7	Ready for use.	8	Days from 3 to 7.	9	Per cent of a good crop.	10	Quality of crop.	Year.	1	Planted.	2	Days from 1 to 8.	3	Above ground.	4	In blossom.	5	Days from 4 to 6.	6	Ripe.	7	Ready for use.	8	Days from 3 to 7.	9	Per cent of a good crop.	10	Quality of crop.
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## TOMATO.

## SWEET CORN.

## CUCUMBER.

1883								
1884								
1885.	May 24	8	June 1	July 17	40	Aug. 25	July 18	47
1886.	May 14	8	May 22	July 3	48	Aug. 20	July 15	54
1887.	May 21	7	May 28	July 7	39	Ang. 15	July 16	49
1888.	Apr. 23	17	May 10	July 1	66	Sept. 5	July 16	67
1889.	May 16	11	May 27	July 9	64	Sept. 12	July 18	52
1890.	May 16	13	May 29	June 28	79	Sept. 15	July 10	80
								50
1891								
1892								
1893								
1894								
1895								
1896								
1897.	May 19	16	June 4	July 12	45	Aug. 26	July 24	50
1898								
1899								
1900								
1901								
1902								
1903								
1904								
1905								
1906								
1907								
1908								
1909								
1910								
1911								
1912.	May 19	8	May 27	July 5	56	Aug. 30	July 15	49
Aver- age.	May 15	11	May 26	July 5	56	Aug. 30	July 15	50
E a r- liest.	Apr. 23	....	May 10	June 28	....	Aug. 15	July 10	52
Latest	May 24	....	June 4	July 12	....	Sept. 15	July 26	....

## SORGHUM.

1883											
1884											
1885	May 19	7	May 26	Aug. 16	40	Sept. 25	Sept. 25	122			
1886											
1887											
1888	May 22	7	May 29	Aug. 14	31	Sept. 14	Sept. 14	108	90	Good.	
1889	May 18	21	June 8	Sept. 3	17	Sept. 20	Sept. 20	104	90	Good.	
1890											
1891	May 9	14	May 23	Aug. 22	27	Sept. 18	Sept. 18	118	90	Good.	
1892											
1893	May 12	10	May 22	Aug. 5	27	Sept. 1	Sept. 1	102	100	Good.	
1894											
1895	Apr. 30	8	May 8	July 29	38	Sept. 5	Sept. 5	120	80	Good.	
1896											
1897											
1898											
1899	June 5	5	June 10	Aug. 9	42	Sept. 20	Sept. 20	102	95	Good.	
1900											
1901	May 16										
1902											
1903											
1904											
1905											
1906											
1907											
1908											
1909											
1910											
1911											
1912											
Aver- age	May 16	11	May 27	Aug. 14	32	Sept. 15	Sept. 15	111	91		
Ear- liest	Apr. 30	....	May 8	July 29	....	Sept. 1	....				
Latest	June 15	....	June 10	Sept. 3	....	Sept. 25	....				

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 2.—*Phenological observations at Wauseon, Ohio, on 20 different field and garden crops, 1883 to 1912, inclusive—Concluded.*

<u>Year.</u>	<u>Planted.</u>	<u>Days from 1 to 3.</u>	<u>Above ground.</u>	<u>In blossom.</u>	<u>Ripe.</u>	<u>Ready for use.</u>	<u>Days from 3 to 7.</u>	<u>Per cent of a good crop.</u>	<u>Quality of crop.</u>
1	Planted.								
2		Days from 1 to 3.							
3			Above ground.						
4				In blossom.					
5					Days from 4 to 6.				
6						Ripe.			
7							Ready for use.		
8								Days from 3 to 7.	
9								Per cent of a good crop.	
10									Quality of crop.

## PUMPKIN.

1883										
1884										
1885										
1886										
1887	May 11	11	May 22	July 14	63	Sept. 15	Sept. 15	116	80	
1888	June 4	6	June 10							
1889										
1890	May 31	8	June 8	July 20	62	Sept. 20	Sept. 20	104	100	
1891	May 14	8	May 22	July 10	47	Aug. 26	Aug. 26	96	90	
1892										
1893	May 13	19	June 1	July 8	43	Aug. 20	Aug. 20	80	50	
1894	May 3	13	May 16	July 5	None					
1895	May 1	10	May 11	July 4	78	Sept. 20	Sept. 20	132	25	
1896										
1897										
1898										
1899										
1900	June 5	7	June 12	July 18	45	Sept. 1	Sept. 1	81	75	
1901										
1902										
1903										
1904										
1905										
1906										
1907										
1908										
1909										
1910	May 24	16	June 9	July 21	39	Aug. 25	Aug. 25	77	75	
1911										
1912	May 18	9	May 27	July 12	60	Sept. 10	Sept. 10	116	60	
Aver-	May 10	8	May 18	June 30						
age.										
Earl-	May 18	10	May 28	July 12	56	Sept. 6	Sept. 6	101	69	
est.										
Latest	May 1	....	May 11	June 30	....	Aug. 20	Aug. 20	....	....	
	June 5	....	June 12	July 21	....	Sept. 20	Sept. 20	....	....	

CLOVER.

1883				June 11	44	July 25	June 30	19	...
1884				June 12	61	Aug. 12	June 28	16	...
1885				June 11	83	Sept. 2	June 27	16	...
1886				May 31	91	Aug. 30	June 17	18	\$5
1887				June 3	78	Aug. 20	June 15	12	Good.
1888				June 13	79	Aug. 30	June 26	13	Good.
1889				June 8	104	Sept. 20	June 24	16	Fair.
1890				June 6	96	Sept. 10	June 23	17	Good.
1891				May 31	81	Aug. 20	June 20	20	...
1892				June 4	4	-----	June 24	20	Good.
1893				June 5	81	Aug. 25	June 20	15	...
1894				May 30	1	-----	June 18	19	Good.
1895				May 30	92	Aug. 30	June 14	15	Fair.
1896				May 25	1	-----	June 10	16	Good.
1897				June 1	80	Aug. 20	June 22	21	...
1898				June 4	110	Sept. 2	June 20	16	Good.
1899				May 28	105	Sept. 10	June 18	21	...
1900				May 26	-----	-----	June 24	70	Good.
1901				May 30	-----	-----	June 24	-----	...
1902				-----	-----	-----	-----	-----	...
1903				-----	-----	-----	-----	-----	...
1904				June 15	73	Aug. 27	June 27	12	40
1905				June 2	89	Aug. 30	June 20	18	Good.
1906				May 23	-----	-----	-----	-----	...
1907				June 13	-----	-----	July 3	20	Good.
1908				May 28	-----	-----	June 30	33	...
1909				June 10	107	Sept. 25	July 5	25	Good.
1910				May 24	-----	-----	June 24	31	75
1911				May 25	-----	No seed.	June 24	30	Good.
1912				May 30	118	Sept. 25	June 26	27	Fair.
Aver- age.				June 4	87	Aug. 30	June 23	19	Good.
Earli- est.				May 24	44	July 25	June 10	12	...
Latest				June 15	118	Sept. 25	July 5	33	...

## SQUASH.

1883									
1884									
1885									
1886	May 19	16	June 4	July 18	45	Sept. 1	Sept. 1	89	
1886	May 12	12	May 24	July 8	64	Sept. 10	Sept. 10	109	85
1887	June 4	8	June 12						
1888	May 21	10	May 31	July 19	63	Sept. 20	Sept. 20	112	25
1889	June 3	10	June 13	None					
1891									
1892									
1893	May 15	18	June 2	July 10	62	Sept. 10	Sept. 10	100	50
1894									
1895									
1896									
1897									
1898									
1899									
1900	June 3	7	June 10	July 20	47	Sept. 25	Sept. 25	87	60
1901									
1902									
1903									
1904									
1905									
1906									
1907									
1908									
1909									
1910									
1911									
1912	May 5	13	May 18	June 25	85	Sept. 18	Sept. 18	123	75
Aver-	age.								
Earli-	May 22	12	June 3	July 12	64	Sept. 14	Sept. 14	103	59
est.	May 5	....	May 18	June 25	....	Sept. 1	....		
Latest	June 4	....	June 13	July 20	....	Sept. 25	....		

TIMOTHY.

1833				July 1	29	July 30	July 23	22	
1834				June 28	17	July 15	July 3	5	
1835				June 30	24	July 24	July 8	8	
1836				June 20	30	July 20	July 5	15	60
1837				June 20	28	July 18	July 5	15	Good.
1838				June 22	42	Aug. 2	July 6	14	Good.
1839				June 28	43	Aug. 10	July 16	18	Good.
1890				June 24	33	Aug. 1	July 6	12	Good.
1891				June 22	28	July 20	July 7	15	Good.
1892				June 22	33	July 25	July 14	22	Good.
1893				June 24	34	July 28	July 7	13	Good.
1894				June 19	32	July 21	July 2	13	Good.
1895				June 18	48	Aug. 5	July 5	17	Fair.
1896				June 15	25	July 10	June 29	14	Good.
1897				June 23	27	July 20	July 8	15	Good.
1898				June 16	28	July 14	July 6	20	
1899				June 18	20	July 8	June 27	9	Good.
1900				June 24	-----	-----	-----	-----	
1901				June 24	-----	-----	July 10	-----	
1902				-----	-----	-----	-----	-----	
1903				June 24	31	July 25	July 6	12	Good.
1904				June 16	60	Aug. 15	July 15	29	Good.
1905				June 20	-----	-----	-----	-----	
1906				June 20	-----	-----	-----	-----	
1907				July 2	41	Aug. 12	July 15	13	Good.
1908				June 22	33	July 25	July 8	16	Good.
1909				June 24	36	July 30	July 15	21	Good.
1910				June 26	-----	-----	July 11	15	Good.
1911				June 19	26	July 15	July 4	15	Good.
1912				June 22	30	July 22	July 8	17	Good.
Aver-	age.			June 23	32	July 25	July 9	16	79
Earl-	est.			June 15	17	July 8	June 27	5	
Lat- est				July 2	60	Aug. 15	July 23	29	

## SUPPLEMENT NO. 2.

TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs, and vines, 1883 to 1912, inclusive.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blos-som.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blos-som.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

## BLACK WALNUT (600).

1883	May 12	May 27	June 7	June 8	.....	Oct. 1	Oct. 22	.....	Apr. 30	May 18	May 26	May 30	.....	Oct. 10	Oct. 28	
1884	May 6	May 22	June 6	June 26	.....	Sept. 18	Oct. 17	.....	May 7	May 16	May 22	May 22	.....	Sept. 26	Nov. 8	
1885	May 19	May 28	June 11	June 8	.....	Oct. 9	Oct. 23	.....	May 13	May 20	May 25	May 24	.....	Sept. 26	Oct. 19	
1886	Apr. 28	May 9	May 19	May 29	Sept. 22	Oct. 5	Oct. 14	Full...	Apr. 24	May 3	May 16	May 11	Sept. 20	Oct. 8	Oct. 15	Full...
1887	May 12	May 20	May 30	May 26	Oct. 1	Sept. 20	Oct. 1	Scant...	May 10	May 16	May 25	May 18	Oct. 1	Sept. 25	Oct. 25	Full...
1888	May 12	May 26	June 12	June 13	Oct. 6	Sept. 30	Oct. 12	Full...	May 9	May 20	May 28	May 28	Sept. 30	Oct. 5	Oct. 18	Scant...
1889	Apr. 30	May 11	May 22	May 27	Sept. 20	Sept. 22	Oct. 5	Scant...	May 4	May 9	May 13	May 22	Sept. 30	Oct. 9	Oct. 9	Full...
1890	May 5	May 18	June 4	June 7	Oct. 1	Oct. 2	Oct. 10	Full...	Apr. 30	May 16	May 26	June 1	Oct. 1	Oct. 5	Oct. 13	Full...
1891	Apr. 30	May 12	May 25	June 6	Oct. 5	Oct. 7	Oct. 15	Full...	Apr. 30	May 9	May 19	May 13	Oct. 5	Oct. 7	Oct. 31	Full...
1892	May 14	May 25	June 12	June 15	Oct. 5	Oct. 2	Oct. 16	Full...	May 10	May 19	May 31	May 28	Oct. 1	Oct. 6	Oct. 18	Scant...
1893	May 14	May 24	June 8	June 16	Oct. 2	Oct. 10	Oct. 17	Full...	May 11	May 19	May 28	May 28	Oct. 2	Oct. 5	Oct. 16	Full...
1894	May 3	May 18	May 28	May 26	Sept. 30	Sept. 26	Oct. 16	Full...	May 3	May 10	May 22	May 13	Sept. 25	Sept. 26	Oct. 12	Scant...
1895	May 2	May 10	May 24	May 18	Sept. 30	Oct. 11	Oct. 18	Full...	May 2	May 8	May 12	May 11	Oct. 2	Oct. 11	Oct. 25	Full...
1896	Apr. 26	May 8	May 18	May 14	Oct. 5	Sept. 24	Oct. 2	Scant...	Apr. 25	May 1	May 12	May 12	Sept. 25	Sept. 27	Oct. 12	Scant...
1897	May 6	May 17	May 27	May 26	Oct. 2	Sept. 30	Oct. 6	Full...	May 7	May 15	May 23	May 25	Oct. 1	Sept. 24	Oct. 3	Full...
1898	May 6	May 16	May 30	June 1	.....	.....	.....	.....	May 11	May 19	May 27	May 28	.....	.....	.....	.....
1899	Apr. 28	May 10	May 20	June 2	.....	.....	.....	.....	Apr. 25	Apr. 30	May 10	May 23	.....	.....	.....	.....
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 23	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	May 16	.....	.....	.....	.....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	May 22	June 10	May 23	May 23	Sept. 30	Sept. 22	Oct. 22	.....	May 18	June 1	May 13	May 25	Sept. 30	Sept. 30	Oct. 28	.....
1906	May 22	May 30	May 23	May 23	.....	.....	.....	.....	May 18	May 18	May 28	May 25	.....	.....	.....	.....
1907	June 2	June 15	June 14	June 14	.....	.....	.....	.....	June 3	June 16	.....	.....	.....	Sept. 27	Oct. 15	.....
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1912	May 6	May 18	May 25	May 20	Sept. 30	Oct. 8	Oct. 14	Full...	May 8	May 13	May 28	May 26	Oct. 1	Nov. 5	Nov. 10	Scant...
Average	May 6	May 19	June 1	June 2	Oct. 1	Sept. 30	Oct. 13	.....	May 4	May 15	May 23	May 21	Sept. 29	Oct. 3	Oct. 20	.....
Earliest	Apr. 26	May 8	May 18	May 14	Sept. 20	Sept. 18	Oct. 1	.....	Apr. 24	Apr. 30	May 10	May 11	Sept. 20	Sept. 24	Oct. 3	.....
Latest	May 19	June 2	June 15	June 16	Oct. 6	Oct. 11	Oct. 23	.....	May 13	June 3	June 16	June 1	Oct. 5	Nov. 5	Nov. 10	.....

## PIG HICKORY (607).

1883	May 10	May 20	May 27	June 1	.....	Oct. 8	Nov. 1	.....	Apr. 26	May 1	May 5	Apr. 14	.....	Oct. 6	Oct. 20	
1884	May 6	May 12	May 21	May 19	.....	Sept. 24	Nov. 3	.....	Apr. 16	Apr. 27	May 8	Apr. 10	.....	Oct. 4	Nov. 8	
1885	May 15	May 21	May 25	May 20	.....	Sept. 24	Oct. 18	.....	Apr. 20	May 7	May 16	Apr. 20	.....	Sept. 29	Nov. 7	
1886	Apr. 25	May 4	May 20	May 9	Sept. 26	Oct. 15	Oct. 20	Full...	Apr. 21	Apr. 26	Apr. 21	May 2	Oct. 30	Nov. 13	Full...	
1887	May 11	May 17	May 26	May 16	Oct. 1	Sept. 25	Oct. 30	Scant...	Apr. 26	May 3	May 10	Apr. 11	Oct. 10	Nov. 8	Full...	
1888	May 7	May 20	May 27	May 26	Sept. 30	Oct. 12	Oct. 30	Full...	Apr. 30	May 12	May 20	Apr. 13	Oct. 27	Nov. 3	Full...	
1889	May 6	May 9	May 12	May 17	Sept. 23	Oct. 8	Oct. 9	Scant...	Apr. 20	May 5	May 5	Apr. 3	Oct. 24	Oct. 30	Full...	
1890	May 4	May 22	May 30	June 4	Oct. 5	Oct. 10	Oct. 13	Full...	Apr. 21	Apr. 27	May 7	Apr. 14	May 22	Oct. 24	Nov. 11	Full...
1891	Apr. 30	May 11	May 19	May 15	Oct. 10	Oct. 7	Nov. 10	Full...	Apr. 20	Apr. 27	May 8	Apr. 14	May 8	Oct. 13	Oct. 31	Scant...
1892	May 17	May 24	June 3	June 1	Oct. 1	Oct. 6	Oct. 24	Scant...	Apr. 28	May 2	May 14	Mar. 30	Oct. 12	Oct. 30	Full...	
1893	May 15	May 25	June 6	June 1	Oct. 5	Oct. 12	Nov. 8	Full...	Apr. 17	May 8	May 20	Apr. 7	Mar. 30	Oct. 16	Scant...	
1894	May 7	May 14	May 26	May 17	Sept. 25	Sept. 27	Oct. 20	Scant...	Apr. 17	Apr. 26	May 5	Mar. 18	May 14	Oct. 15	Nov. 8	Full...
1895	May 4	May 10	May 16	May 15	Oct. 12	Oct. 11	Nov. 1	Full...	Apr. 18	Apr. 25	May 8	Apr. 6	May 12	Oct. 22	Nov. 1	Full...
1896	Apr. 28	May 3	May 10	May 12	Sept. 25	Sept. 24	Oct. 14	Scant...	Apr. 15	Apr. 20	Apr. 28	Apr. 12	May 3	Oct. 6	Oct. 22	Full...
1897	May 7	May 14	May 24	May 23	Oct. 10	Sept. 24	Oct. 20	Full...	Apr. 26	May 3	May 10	Apr. 16	None...	Oct. 8	Oct. 25	None...
1898	May 11	May 20	May 27	May 25	.....	.....	.....	.....	Apr. 18	Apr. 24	May 8	Apr. 21	None...	.....	.....	.....
1899	Apr. 29	May 4	May 15	May 23	.....	.....	.....	.....	Apr. 23	May 2	Apr. 21	Apr. 15	None...	.....	.....	.....
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	May 18	June 1	May 12	May 12	Sept. 30	Sept. 23	Oct. 30	.....	May 4	May 13	May 13	Apr. 12	May 4	Sept. 25	Oct. 30	.....
1906	May 16	May 26	May 26	May 26	.....	.....	.....	.....	May 23	May 4	May 4	Apr. 19	.....	Oct. 19	Oct. 28	.....
1907	June 1	June 15	.....	.....	Oct. 12	Oct. 30	.....	.....	May 3	May 20	Apr. 23	Apr. 23	Apr. 8	Oct. 24	Oct. 24	.....
1908	.....	May 20	.....	.....	.....	.....	.....	.....	May 3	May 18	Apr. 8	Apr. 8	.....	.....	.....	.....
1909	.....	.....	.....	.....	.....	.....	.....	.....	May 10	May 22	Apr. 15	Apr. 15	May 10	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1912	May 8	May 17	May 27	May 25	Oct. 5	Nov. 4	Scant...	May 6	May 12	May 24	Apr. 18	May 14	Oct. 20	Oct. 28	Full...	
Average	May 7	May 16	May 25	May 22	Oct. 2	Oct. 6	Oct. 26	.....	Apr. 22	Apr. 30	May 10	Apr. 11	May 12	Oct. 16	Nov. 2	.....
Earliest	Apr. 25	May 3	May 10	May 9	Sept. 25	Sept. 24	Oct. 9	.....	Apr. 15	Apr. 20	Apr. 26	Apr. 18	May 2	Sept. 25	Oct. 20	.....
Latest	May 17	June 1	June 15	June 4	Oct. 12	Nov. 4	Nov. 10	.....	May 6	May 12	May 24	Apr. 23	May 30	Oct. 30	Nov. 13	.....

## QUAKING ASPEN (615).

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs, and vines, 1883 to 1912, inclusive—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

**COTTONWOOD (617).**

1883																
1884																
1885																
1886																
1887																
1888																
1889																
1890																
1891																
1892																
1893																
1894																
1895																
1896																
1897																
1898																
1899																
1900																
1901																
1902																
1903																
1904																
1905																
1906																
1907																
1908																
1909																
1910																
1911																
1912																
Average Earliest																
Earliest																
Latest																
May 12	May 2	May 9	May 25	May 26												

**BLACK WILLOW (618).**

1883																
1884																
1885																
1886																
1887																
1888																
1889																
1890																
1891																
1892																
1893																
1894																
1895																
1896																
1897																
1898																
1899																
1900																
1901																
1902																
1903																
1904																
1905																
1906																
1907																
1908																
1909																
1910																
1911																
1912																
Average Earliest																
Earliest																
Latest																
May 12	May 2	May 9	May 25	May 26												

**IRONWOOD (644).**

1883																
1884																
1885																
1886																
1887																
1888																
1889																
1890																
1891																
1892																
1893																
1894																
1895																
1896																
1897																
1898																
1899																
1900																
1901																
1902																
1903																
1904																
1905																
1906																
1907																
1908																
1909																
1910																
1911																
1912																
Average Earliest																
Earliest																
Latest																
May 12	May 2	May 9	May 16	May 23	May 26											
1901																
1902																
1903																
1904																
1905																
1906																
1907																
1908																
1909																
1910																
1911																
1912																
Average Earliest																
Earliest																
Latest																

## SUPPLEMENT NO. 2.

TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs and vines, 1883 to 1912, inclusive—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

## BLACK OAK (660).

1883	May 13	May 25	June 3	May 26	.....	Oct. 15	Nov. 5	.....	May 8	May 22	June 5	May 23	.....	Oct. 18	Nov. 10	.....
1884	May 7	May 14	May 22	May 22	.....	Oct. 13	Nov. 21	.....	May 6	May 14	May 23	May 25	.....	Oct. 13	Nov. 20	.....
1885	May 16	May 23	May 29	May 27	.....	Oct. 2	Nov. 6	.....	May 13	May 22	May 30	May 26	.....	Oct. 4	Nov. 13	.....
1886	Apr. 24	May 11	May 20	May 2	Sept. 24	Oct. 24	Nov. 7	Full.	Apr. 24	May 9	May 17	May 6	Sept. 15	Oct. 23	Nov. 8	Full.
1887	May 5	May 15	May 27	May 20	Oct. 1	Oct. 10	Oct. 28	Full.	May 10	May 16	May 26	May 20	Sept. 30	Oct. 10	Nov. 1	Full.
1888	May 11	May 22	May 29	May 13	Oct. 12	Oct. 20	Nov. 1	Full.	May 11	May 25	June 4	May 28	Oct. 8	Oct. 18	Nov. 8	Full.
1889	May 8	May 10	May 17	May 10	Oct. 1	Oct. 24	Oct. 30	Full.	May 7	May 10	May 16	May 14	Sept. 25	Oct. 24	Oct. 30	Full.
1890	May 4	May 18	May 28	May 18	Oct. 8	Oct. 24	Nov. 6	Full.	May 6	May 24	June 2	May 27	Oct. 5	Oct. 24	Nov. 10	Full.
1891	Apr. 29	May 12	May 22	May 7	Oct. 15	Oct. 7	Nov. 5	Full.	Apr. 30	May 8	May 22	May 9	Oct. 5	Oct. 8	Nov. 14	Full.
1892	May 14	May 23	June 8	May 18	Sept. 28	Oct. 18	Nov. 8	Full.	May 16	May 20	June 6	May 18	Sept. 28	Oct. 8	Oct. 22	Full.
1893	May 12	May 24	June 6	May 31	Oct. 2	Oct. 17	Nov. 12	Full.	May 13	May 25	June 8	May 27	Oct. 5	Oct. 17	Nov. 17	Full.
1894	May 3	May 10	May 22	May 9	Sept. 30	Oct. 15	Oct. 30	Scant.	May 6	May 14	May 27	May 11	Sept. 30	Oct. 15	Oct. 28	Full.
1895	May 3	May 8	May 16	May 14	Oct. 18	Oct. 22	Nov. 5	Full.	May 6	May 11	May 25	May 16	Oct. 15	Oct. 28	Nov. 6	Full.
1896	Apr. 25	May 2	May 10	May 7	Sept. 25	Oct. 6	Oct. 18	Scant.	Apr. 26	May 4	May 12	May 9	Sept. 12	Oct. 6	Oct. 24	Scant.
1897	May 7	May 13	May 25	May 27	Oct. 10	Oct. 6	Oct. 18	Full.	May 7	May 12	May 23	May 26	Oct. 5	Oct. 5	Oct. 18	Full.
1898	May 10	May 18	May 28	May 26	.....	.....	.....	.....	May 10	May 18	May 28	May 26	.....	.....	.....	.....
1899	Apr. 27	May 5	May 14	May 20	.....	.....	.....	.....	Apr. 28	May 6	May 16	May 21	.....	.....	.....	.....
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	.....	May 12	May 20	May 18	Oct. 6	Oct. 1	Oct. 22	.....	May 20	June 4	May 19	May 28	Oct. 5	Oct. 10	Nov. 4	.....
1906	.....	May 16	May 28	May 26	.....	.....	.....	.....	May 16	May 28	May 28	May 28	.....	.....	.....	.....
1907	.....	June 2	June 16	.....	.....	Oct. 19	Oct. 30	.....	June 5	June 18	.....	.....	.....	Oct. 25	Nov. 5	.....
1908	.....	May 20	.....	.....	.....	.....	.....	.....	May 20	.....	.....	.....	.....	.....	.....	.....
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1912	May 6	May 15	May 25	May 11	Oct. 10	Oct. 20	Oct. 28	Full.	May 7	May 15	May 26	May 18	Oct. 5	Nov. 4	Nov. 9	Full.
Average	May 6	May 15	May 26	May 18	Oct. 5	Oct. 14	Nov. 2	.....	May 6	May 17	May 28	May 20	Sept. 30	Oct. 16	Nov. 5	.....
Earliest	Apr. 24	May 2	May 10	May 2	Sept. 24	Oct. 1	Oct. 18	.....	Apr. 24	May 4	May 12	May 6	Sept. 12	Oct. 4	Oct. 18	.....
Latest	May 16	June 2	June 16	May 31	Oct. 18	Oct. 24	Nov. 21	.....	May 16	June 5	June 18	May 28	Oct. 15	Nov. 4	Nov. 20	.....

## WHITE OAK (666).

1883	May 13	May 25	June 3	May 26	.....	Oct. 15	Nov. 5	.....	May 8	May 22	June 5	May 23	.....	Oct. 18	Nov. 10	.....
1884	May 7	May 14	May 22	May 22	.....	Oct. 13	Nov. 21	.....	May 6	May 14	May 23	May 25	.....	Oct. 13	Nov. 20	.....
1885	May 16	May 23	May 29	May 27	.....	Oct. 2	Nov. 6	.....	May 13	May 22	May 30	May 26	.....	Oct. 4	Nov. 13	.....
1886	Apr. 24	May 11	May 20	May 2	Sept. 24	Oct. 24	Nov. 7	Full.	Apr. 24	May 9	May 17	May 6	Sept. 15	Oct. 23	Nov. 8	Full.
1887	May 5	May 15	May 27	May 20	Oct. 1	Oct. 10	Oct. 28	Full.	May 10	May 16	May 26	May 20	Sept. 30	Oct. 10	Nov. 1	Full.
1888	May 11	May 22	May 29	May 13	Oct. 12	Oct. 20	Nov. 1	Full.	May 11	May 25	June 4	May 28	Oct. 8	Oct. 18	Nov. 8	Full.
1889	May 8	May 10	May 17	May 10	Oct. 1	Oct. 24	Oct. 30	Full.	May 7	May 10	May 16	May 14	Sept. 25	Oct. 24	Oct. 30	Full.
1890	May 4	May 18	May 28	May 18	Oct. 8	Oct. 24	Nov. 6	Full.	May 6	May 24	June 2	May 27	Oct. 5	Oct. 24	Nov. 10	Full.
1891	Apr. 29	May 12	May 22	May 7	Oct. 15	Oct. 7	Nov. 5	Full.	Apr. 30	May 8	May 22	May 9	Oct. 5	Oct. 8	Nov. 14	Full.
1892	May 14	May 23	June 8	May 18	Sept. 28	Oct. 18	Nov. 8	Full.	May 16	May 20	June 6	May 18	Sept. 28	Oct. 8	Oct. 22	Full.
1893	May 12	May 24	June 6	May 31	Oct. 2	Oct. 17	Nov. 12	Full.	May 13	May 25	June 8	May 27	Oct. 5	Oct. 17	Nov. 17	Full.
1894	May 3	May 10	May 22	May 9	Sept. 30	Oct. 15	Oct. 30	Scant.	May 6	May 14	May 27	May 11	Sept. 30	Oct. 15	Oct. 28	Full.
1895	May 3	May 8	May 16	May 14	Oct. 18	Oct. 22	Nov. 5	Full.	May 6	May 11	May 25	May 16	Oct. 15	Oct. 28	Nov. 6	Full.
1896	Apr. 25	May 2	May 10	May 7	Sept. 25	Oct. 6	Oct. 18	Scant.	Apr. 26	May 4	May 12	May 9	Sept. 12	Oct. 6	Oct. 24	Scant.
1897	May 7	May 13	May 25	May 27	Oct. 10	Oct. 6	Oct. 18	Full.	May 7	May 12	May 23	May 26	Oct. 5	Oct. 5	Oct. 18	Full.
1898	May 10	May 18	May 28	May 27	Oct. 24	Oct. 8	Oct. 20	Full.	May 10	May 18	May 28	May 26	Oct. 5	Oct. 5	Oct. 18	Full.
1899	Apr. 27	May 3	May 11	May 8	.....	.....	.....	.....	Apr. 26	May 3	May 12	May 8	.....	.....	.....	.....
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	.....	May 14	May 26	May 14	Oct. 1	Oct. 5	Oct. 22	.....	May 10	May 20	May 13	May 25	Oct. 1	Oct. 1	Oct. 18	.....
1906	.....	May 14	May 27	May 24	.....	.....	.....	.....	May 14	May 26	May 13	May 25	.....	.....	.....	.....
1907	.....	June 1	June 14	.....	.....	Sept. 28	Oct. 10	.....	June 1	June 15	May 15	.....	.....	Sept. 30	Oct. 20	.....
1908	.....	May 18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1912	May 9	May 19	May 28	May 18	Oct. 5	Oct. 20	Nov. 9	Full.	May 10	May 20	May 30	May 19	Oct. 6	Oct. 28	Nov. 9	Full.
Average	May 12	May 16	May 26	May 17	Oct. 1	Oct. 11	Oct. 28	.....	May 4	May 14	May 23	May 15	Oct. 4	Oct. 11	Oct. 25	.....
Earliest	Apr. 23	May 3	May 10	May 4	Sept. 14	Sept. 28	Oct. 10	.....	Apr. 23	May 1	May 9	May 5	Sept. 13	Sept. 30	Oct. 12	.....
Latest	May 15	June 1	June 14	May 26	Oct. 10	Oct. 24	Nov. 16	.....	May 14	June 1	June 15	May 26	Oct. 10	Oct. 28	Nov. 9	.....

1883	May 13	May 25	June 3	May 26	.....	Oct. 15	Nov. 5	.....	May 8	May 22	June 5	May 23	.....	Oct. 18	Nov. 10	.....
1884	May 7	May 14	May 22	May 22												

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs and vines, 1883 to 1912, inclusive—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

WHITE ELM (672).

1883	Apr. 17	May 5	May 18	Apr. 19	.....	Oct. 4	Oct. 25	.....	May 24	June 1	June 8	.....	.....	Oct. 15	Nov. 4	.....
1884	Apr. 17	May 29	May 16	Apr. 18	.....	Sept. 23	Nov. 10	.....	May 7	May 16	May 25	.....	.....	Oct. 8	Nov. 25	.....
1885	Apr. 23	May 9	May 19	Apr. 22	.....	Sept. 27	Oct. 22	.....	May 13	May 23	May 30	.....	.....	Oct. 9	Nov. 6	.....
1886	Apr. 16	Apr. 28	May 7	Apr. 19	May 11	Oct. 12	Nov. 3	Full.	Apr. 23	May 4	May 16	June 9	Nov. 1	Nov. 4	Nov. 11	Scant.
1887	Apr. 16	May 4	May 12	Apr. 11	May 18	Sept. 25	Nov. 5	Full.	May 9	May 14	May 25	June 11	Oct. 10	Sept. 25	Nov. 5	Scant.
1888	Apr. 25	May 8	May 18	Apr. 15	May 28	Oct. 10	Oct. 22	Full.	May 14	May 28	June 12	June 19	Oct. 31	Oct. 30	Nov. 18	Scant.
1889	Apr. 21	May 6	May 9	Apr. 12	May 17	Sept. 30	Oct. 18	Full.	May 8	May 11	May 20	June 20	Oct. 24	Oct. 24	Oct. 28	Scant.
1890	Apr. 16	May 2	May 18	Apr. 17	May 20	Oct. 7	Oct. 28	Full.	May 13	May 26	June 5	June 18	Oct. 8	Oct. 10	Nov. 15	Full.
1891	Apr. 21	Apr. 29	May 11	Apr. 15	May 18	Oct. 7	Oct. 24	Full.	Apr. 30	May 10	May 30	June 20	Oct. 10	Oct. 23	Nov. 10	Full.
1892	Apr. 20	May 10	May 20	Apr. 11	May 27	Oct. 6	Oct. 19	Full.	May 12	May 26	June 8	None	.....	Oct. 30	Nov. 15	None.
1893	Apr. 16	May 10	May 20	Apr. 7	May 30	Oct. 17	Oct. 30	Full.	May 18	May 30	June 10	June 25	Oct. 5	Oct. 17	Nov. 22	Full.
1894	Apr. 27	May 7	May 13	Mar. 20	None	Oct. 5	Oct. 17	None.	May 2	May 14	May 26	June 23	Oct. 10	Oct. 15	Oct. 28	Scant.
1895	Apr. 26	May 5	May 10	Apr. 19	May 15	Oct. 11	Oct. 25	Full.	May 2	May 9	May 19	June 24	Oct. 10	Oct. 22	Nov. 3	Full.
1896	Apr. 19	Apr. 24	Apr. 30	Apr. 14	May 10	Oct. 6	Oct. 18	Full.	Apr. 22	May 4	May 16	None	.....	Oct. 19	Nov. 5	None.
1897	Apr. 24	May 2	May 10	Apr. 20	None	Oct. 2	Oct. 25	None.	May 12	May 19	June 3	None	.....	Oct. 3	Nov. 8	None.
1898	Apr. 28	May 6	May 16	Mar. 28	.....	.....	.....	.....	May 6	May 17	May 27	.....	.....	.....	.....	.....
1899	Apr. 26	May 1	May 6	Apr. 21	May 12	.....	.....	.....	May 1	May 8	May 20	.....	.....	.....	.....	.....
1900	.....	.....	.....	Apr. 16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1912	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Average	Apr. 23	May 7	May 18	Apr. 25	May 14	Oct. 11	Nov. 11	Full.	May 20	May 28	June 11	.....	.....	.....	.....	.....
Earliest	Apr. 21	May 5	May 16	Apr. 13	May 17	Oct. 8	Oct. 28	.....	May 8	May 19	May 31	June 19	Oct. 16	Oct. 17	Nov. 8	.....
Latest	Apr. 16	Apr. 24	Apr. 30	Mar. 20	May 3	Sept. 23	Oct. 17	.....	Apr. 22	May 4	May 16	June 9	Oct. 5	Oct. 3	Oct. 15	.....
.....	Apr. 28	May 18	June 1	Apr. 24	May 30	Oct. 24	Nov. 11	.....	May 24	June 1	June 15	June 25	Nov. 1	Nov. 4	Nov. 25	.....

OSAGE ORANGE (678).

1883	May 12	May 25	Apr. 5	Oct. 24	Nov. 8	.....	.....	.....	May 20	June 8	.....	.....	.....	Oct. 15	.....	.....
1884	May 4	May 20	Mar. 31	May 6	Oct. 18	Oct. 28	.....	.....	May 21	May 29	June 15	.....	.....	.....	.....	.....
1885	May 10	May 23	Apr. 14	May 20	Oct. 16	Oct. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	May 18	May 22	Apr. 13	May 19	Oct. 5	Oct. 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1887	May 14	May 22	Apr. 13	May 19	Oct. 5	Oct. 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1888	May 8	May 22	Apr. 24	May 14	Oct. 2	Oct. 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1889	Apr. 24	May 8	May 16	June 15	Sept. 15	Sept. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1890	May 10	May 18	May 27	June 13	Sept. 22	Sept. 25	Oct. 22	Scant.	Apr. 27	May 17	May 30	May 12	Aug. 20	Oct. 2	Oct. 13	Full.
1891	Apr. 27	May 6	May 18	June 21	Oct. 5	Oct. 31	Full.	.....	Apr. 28	May 12	May 23	May 5	Aug. 25	Oct. 7	Oct. 20	Full.
1892	May 8	May 17	May 23	June 14	Oct. 30	Oct. 8	Scant.	Apr. 30	May 17	May 28	May 14	Sept. 1	Oct. 5	Oct. 18	Full.	.....
1893	May 10	May 17	May 29	June 20	Oct. 1	Oct. 5	Scant.	May 6	May 22	May 30	May 21	Sept. 10	Oct. 6	Oct. 22	Full.	.....
1894	May 20	May 29	May 15	June 15	Aug. 20	Sept. 18	Full.	Apr. 30	May 8	May 20	May 3	Sept. 5	Oct. 30	Oct. 5	Full.	.....
1895	May 29	May 5	May 14	May 30	Aug. 25	Sept. 28	Full.	May 4	May 8	May 25	May 18	None	Oct. 2	Oct. 12	None.	.....
1896	May 27	May 5	May 9	May 27	Sept. 25	Oct. 1	Scant.	Apr. 20	Apr. 27	May 6	Apr. 26	None	Sept. 26	Oct. 1	Oct. 12	None.
1897	May 20	May 28	May 9	May 27	Sept. 25	Oct. 2	Scant.	May 4	May 12	May 25	May 9	Aug. 18	Oct. 2	Oct. 12	Full.	.....
1898	May 27	May 5	May 22	June 23	Oct. 1	Oct. 2	Scant.	Apr. 27	May 8	May 20	Apr. 29	.....	.....	.....	.....	.....
1899	May 5	May 11	May 26	June 16	.....	.....	.....	Apr. 26	May 1	May 18	May 12	.....	.....	.....	.....	.....
1900	Apr. 24	Apr. 30	May 12	June 22	June 14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Average	May 8	May 16	May 26	June 18	Oct. 1	Oct. 20	Oct. 28	Scant.	May 2	May 14	May 25	May 14	Sept. 3	Oct. 3	Oct. 17	Full.
Earliest	Apr. 31	May 11	May 21	June 12	Sept. 20	Oct. 3	Oct. 20	.....	Apr. 20	Apr. 27	May 6	Apr. 26	Aug. 18	Sept. 25	Oct. 1	.....
Latest	May 10	May 28	June 7	June 26	Oct. 5	Oct. 20	Nov. 2	.....	May 16	May 26	June 5	June 1	Sept. 25	Oct. 20	Nov. 8	.....

YELLOW PARILLA (868).

1883	May 1	May 13	May 24	.....	.....	Oct. 2	Nov. 2	.....	May 10	May 24	June 5	May 27	.....	Sept. 30	Oct. 30	.....	
1884	May 7	May 18	May 26	June 26	.....	Sept. 30	Oct. 26	.....	May 6	May 19	June 1	June 1	.....	Sept. 30	Nov. 8	.....	
1885	Apr. 20	Apr. 30	May 14	May 24	.....	Sept. 13	Oct. 18	Oct. 30	Scant.	May 16	May 26	June 3	May 29	.....	Oct. 9	Oct. 29	Not full.
1886	May 2	May 9	May 16	June 10	.....	Sept. 10	Sept. 25	Oct. 15	Full.	Apr. 21	May 10	May 26	May 2	Aug. 24	Oct. 12	Oct. 28	.....
1887																	

## SUPPLEMENT NO. 2.

TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs and vines, 1883 to 1912, inclusive—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

## LILAC

WITCH HAZEL (972).																
1883.									May 15	May 21	May 26	Oct. 8			Oct. 5	Oct. 20
1884.	Apr. 10	Apr. 28	May 15	May 16		Oct. 27	Nov. 20		Apr. 20	May 3	May 12	Oct. 25			Oct. 1	Oct. 31
1885.	Apr. 20	May 3	May 14	May 20		Oct. 12	Nov. 5		May 10	May 18	May 24	Oct. 16			Sept. 28	Oct. 23
1886.	Mar. 20	Apr. 19	Apr. 24	May 4		Nov. 1	Nov. 11		Apr. 24	Apr. 29	May 8	Oct. 9	Aug. 30	Oct. 10	Oct. 25	Full.
1887.	Apr. 10	Apr. 24	May 8	May 11		Oct. 10	Nov. 5		Apr. 27	May 3	May 16	Oct. 8	Sept. 10	Oct. 5	Oct. 12	Full.
1888.	Apr. 8	Apr. 28	May 8	May 18		Oct. 16	Oct. 25		May 8	May 15	May 25	Oct. 14	Sept. 20	Oct. 12	Oct. 20	Full.
1889.	Apr. 15	Apr. 23	Apr. 30	May 9		Sept. 30	Oct. 9		May 2	May 7	May 11	Oct. 1	Oct. 1	Sept. 20	Sept. 30	Full.
1890.	Apr. 5	Apr. 22	Apr. 30	May 14		Nov. 3	Nov. 20		May 7	May 11	May 18	Oct. 5	Sept. 15	Oct. 2	Oct. 13	Full.
1891.	Apr. 14	Apr. 23	Apr. 29	May 6		Oct. 23	Nov. 7		Apr. 20	Apr. 27	May 3	Oct. 8	Oct. 15	Oct. 23	Nov. 7	Full.
1892.	Apr. 4	Apr. 29	May 12	May 17		Oct. 30	Nov. 14		May 13	May 19	May 28	Sept. 30	Sept. 15	Oct. 1	Oct. 18	Full.
1893.	Apr. 6	Apr. 16	May 7	May 15		Oct. 6	Oct. 18		May 10	May 16	May 24	Sept. 4	Aug. 25	Oct. 10	Oct. 22	Full.
1894.	Mar. 18	Apr. 19	Apr. 30	May 2		Oct. 5	Oct. 18		Apr. 20	Apr. 28	May 10	Aug. 25	Sept. 20	Oct. 8	Oct. 26	Scant.
1895.	Apr. 12	Apr. 23	May 4	May 5		Oct. 11	Oct. 22		May 4	May 12	May 24	None...	None...	Oct. 11	Oct. 26	None.
1896.	Apr. 13	Apr. 14	Apr. 24	Apr. 30		Oct. 12	Oct. 18									
1897.	Apr. 8	Apr. 25	May 6	May 12		Sept. 28	Oct. 12									
1898.	Mar. 18	Apr. 18	May 1	May 10												
1899.	Apr. 22	Apr. 28	May 3	May 5												
1900.				May 12												
1901.				May 10												
1902.																
1903.																
1904.																
1905.		Apr. 20	May 3	May 6					May 4	May 14						Sept. 30
1906.		Apr. 25	May 4	May 7												
1907.		Apr. 30	May 15	May 17												
1908.		Apr. 23	May 8	May 13												
1909.		May 3	May 16	May 18												
1910.		Apr. 5	Apr. 15	Apr. 17												
1911.																
1912.		Apr. 16	May 4	May 12	May 13											
Average	Apr. 7	Apr. 24	May 4	May 10					May 2	May 9	May 17	Oct. 6	Sept. 7	Oct. 4	Oct. 18	
Earliest	Mar. 18	Apr. 5	Apr. 15	Apr. 17					Apr. 20	Apr. 27	May 3	Sept. 4	Aug. 25	Sept. 20	Sept. 30	
Latest.	Apr. 22	May 4	May 16	May 20					May 15	May 21	May 28	Oct. 25	Oct. 15	Oct. 23	Nov. 7	

## BUTTONWOOD (974).

SWAMP ROSE (1021).																
1883.	May 18	June 2	June 20			Oct. 6	Nov. 1		Apr. 26	May 8	May 18	July 2		Oct. 24	Nov. 10	
1884.	May 10	May 24	June 4			Oct. 10	Nov. 10		Apr. 22	May 8	May 18	July 9		Oct. 12	Oct. 31	
1885.	May 19	May 26	June 1	July 21		Oct. 1	Nov. 2		Apr. 18	Apr. 28	May 6	July 4	Oct. 8	Oct. 24	Nov. 5	Scant.
1886.	Apr. 20	May 10	May 31	July 5	Sept. 20	Oct. 20	Nov. 5	Scant.	Apr. 22	May 2	May 14	June 29	Oct. 10	Oct. 15	Nov. 5	Scant.
1887.	May 8	May 15	May 30	July 7	Sept. 30	Sept. 25	Oct. 15	Full.	Apr. 22	May 1	May 8	July 10	Oct. 8	Oct. 15	Nov. 5	Scant.
1888.	May 18	May 26	June 15	July 24	Oct. 10	Oct. 12	Oct. 25	Scant.	Apr. 23	May 1	May 8	July 10	Oct. 8	Oct. 15	Nov. 5	Scant.
1889.	May 7	May 11	May 22	None...	Oct. 8	Oct. 10	Oct. 25	None...	Apr. 19	Apr. 30	May 7	July 9	Oct. 5	Oct. 9	Oct. 26	Full.
1890.	May 13	May 22	May 31	July 20	None...	Oct. 8	Oct. 25	None...	Apr. 19	Apr. 24	May 2	July 6	Oct. 20	Oct. 3	Oct. 28	Full.
1891.	Apr. 30	May 12	June 6	July 16	Oct. 3	Oct. 7	Oct. 31	Scant.	Apr. 20	Apr. 28	May 6	July 2	Oct. 20	Oct. 10	Oct. 31	Full.
1892.	May 22	May 26	June 10	None...	Oct. 12	Nov. 1	None...	Apr. 17	May 5	May 16	July 15	Oct. 8	Oct. 18	Oct. 30	Full.	Scant.
1893.	May 18	May 25	June 8	July 16	None...	Oct. 18	Nov. 5	None...	Apr. 18	May 7	May 16	July 6	Sept. 30	Oct. 17	Nov. 6	Scant.
1894.	May 5	May 10	June 13	None...	Sept. 27	Oct. 16	Oct. 25	None...	Apr. 27	May 5	May 11	July 2	Sept. 5	Oct. 15	Oct. 16	Scant.
1895.	May 10	May 22	June 12	None...	Oct. 11	Oct. 25	None...	Apr. 24	May 3	May 11	May 11	None...	Oct. 22	Oct. 30	Oct. 5	None.
1896.									Apr. 18	Apr. 25	May 2	June 20	Sept. 10	Oct. 20	Nov. 5	Scant.
1897.	May 14	May 25	May 31	None...	Sept. 22	Oct. 2	None...	Apr. 25	Apr. 29	May 6	July 15	Sept. 25	Oct. 23	Nov. 10	Scant.	Scant.
1898.	May 5	May 18	June 1					Apr. 28	Apr. 27	May 5	May 15	June 27				
1899.								Apr. 22	Apr. 27	May 5	May 15	June 27				
1900.																
1901.													July 4			
1902.																
1903.																
1904.																
1905.		May 21	June 10						May 1	May 6	July 1	Sept. 30				Oct. 22
1906.		May 22	May 31						Apr. 26	May 10	June 26					
1907.		May 28	June 12						May 10	May 18						
1908.		May 26														
1909.																
1910.																
1911.																
1912.		May 18	May 30	June 15	None...		Nov. 3	Nov. 9								
Average	May 12	May 22	June 6	July 16	Oct. 1	Oct. 8	Oct. 26		Apr. 22	May 2	May 10	July 4	Oct. 2	Oct. 18	Oct. 31	
Earliest	Apr. 29	May 10	May 22	July 5	Sept. 20	Sept. 22	Oct. 2		Apr. 17	Apr. 24	May 2	Sept. 5	Oct. 3	Oct. 9	Oct. 10	
Latest.	May 22	June 2	June 20	July 24	Oct. 10	Nov. 3	Nov. 10		Apr. 28	May 10	May 18	July 15	Oct. 20	Oct. 5	Nov. 10	

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs and vines, 1883 to 1912, inclusive—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

DWARF WILD ROSE (1023).

### **SCARLET FRUITED THORN (1041).**

## **COFFEE TREE (1060).**

## PRICKLY ASH

## SUPPLEMENT NO. 2.

TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs, and vines, 1883 to 1912, inclusive—Continued.*

{The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

## STAGHORN SUMAC (1184).

1883.....																
1884.....	May 5	May 22	June 3	June 20			Sept. 19	Oct. 20								
1885.....	May 21	May 26	May 30	June 26			Sept. 28	Oct. 27								
1886.....	Apr. 23	May 4	May 15	June 12	Oct. 8	Oct. 6	Oct. 22	Full.....								
1887.....	May 8	May 15	May 25	July 2	Sept. 20	Sept. 25	Oct. 10	Full.....								
1888.....	May 20	May 27	June 12	June 25	Sept. 22	Sept. 22	Oct. 10	Full.....								
1889.....	May 1	May 12	May 18	June 24	Sept. 20	Sept. 23	Sept. 30	Full.....								
1890.....	May 12	May 20	June 3	June 25	Aug. 25	Sept. 28	Oct. 7	Full.....								
1891.....	Apr. 23	May 10	May 30	June 20	Sept. 10	Oct. 1	Oct. 10	Full.....								
1892.....	May 12	May 18	June 1	June 23	Sept. 10	Oct. 2	Oct. 18	Full.....								
1893.....	May 12	May 18	May 26	June 23	Sept. 1	Sept. 30	Oct. 14	Full.....								
1894.....	May 12	May 21	May 30	June 30	Aug. 28	Sept. 27	Oct. 10	Full.....								
1895.....	May 2	May 7	May 25	June 25	Aug. 25	Oct. 2	Oct. 11	Full.....								
1896.....	Apr. 20	Apr. 26	May 8	June 10	Sept. 25	Oct. 6	Oct. 15	Full.....								
1897.....	May 4	May 9	May 25	None.	None.	Sept. 22	Oct. 1	None.....								
1898.....	May 8	May 14	May 24													
1899.....	Apr. 27	May 3	May 13													
1900.....																
1901.....															June 16	
1902.....																
1903.....																
1904.....																
1905.....		May 10	May 21													
1906.....																
1907.....																
1908.....																
1909.....																
1910.....																
1911.....																
1912.....																
Average	May 4	May 13	May 24	June 23	Sept. 3	Sept. 28	Oct. 13									
Earliest	Apr. 20	Apr. 26	May 8	June 10	Aug. 25	Sept. 19	Sept. 30									
Latest	May 21	May 27	June 12	July 2	Oct. 18	Oct. 8	Oct. 27									

## WAHOO (1195).

1883.....	Apr. 14	Apr. 30	May 12	June 26			Oct. 10	Nov. 1								
1884.....	Apr. 20	May 5	May 18	June 18			Oct. 16	Nov. 3								
1885.....	Apr. 23	May 10	May 24	June 11			Oct. 10	Oct. 28								
1886.....	Apr. 14	Apr. 27	May 9	June 6	Oct. 20	Oct. 14	Oct. 31	Scant.....								
1887.....	Apr. 10	Apr. 25	May 15	June 13	Oct. 1	Sept. 25	Oct. 12	Scant.....								
1888.....	Apr. 5	Apr. 30	May 9	June 20	Oct. 5	Oct. 2	Oct. 12	Full.....								
1889.....	Apr. 19	Apr. 2	May 2	July 1	Oct. 16	Sept. 24	Oct. 9	Full.....								
1890.....	Apr. 7	Apr. 23	May 2	June 13	Aug. 28	Sept. 25	Oct. 13	Scant.....								
1891.....	Apr. 12	Apr. 22	do....	June 15	Sept. 25	Oct. 1	Oct. 15	Full.....								
1892.....	Apr. 8	May 5	May 18	June 16	Sept. 20	Oct. 2	Oct. 8	Full.....								
1893.....	Apr. 7	Apr. 24	May 15	June 20	Sept. 18	Sept. 27	Oct. 16	Full.....								
1894.....	Mar. 21	Apr. 26	May 3	June 20	Aug. 30	Sept. 27	Oct. 14	Full.....								
1895.....	Apr. 18	Apr. 29	May 5	June 14	Aug. 28	Sept. 18	Oct. 2	Full.....								
1896.....	Apr. 14	Apr. 19	Apr. 29	June 4	Sept. 30	Oct. 5	Oct. 12	Full.....								
1897.....	Apr. 7	Apr. 25	May 6	June 16	Sept. 30	Oct. 1	Oct. 10	Full.....								
1898.....	Mar. 16	Apr. 14	May 8													
1899.....	Apr. 18	Apr. 25	May 5	May 31												
1900.....				June 15												
1901.....																
1902.....																
1903.....																
1904.....																
1905.....		May 3	May 10	June 10			Oct. 3									
1906.....		May 10	May 19													
1907.....																
1908.....			May 14	May 20												
1909.....			May 15	May 25												
1910.....																
1911.....																
1912.....																
Average	Apr. 11	May 1	May 13	June 15	Sept. 23	Oct. 5	Oct. 16									
Earliest	Mar. 16	Apr. 14	Apr. 29	May 31	Aug. 28	Sept. 18	Oct. 2									
Latest	May 3	May 20	May 31	July 1	Oct. 20	Oct. 18	Nov. 3									

## BITTER SWEET (1196).

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs and vines, 1883 to 1912, inclusive—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful, or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful, or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

WHITE MAPLE (1198).

1883	Apr. 23	May 9	May 19	.....	Oct. 9	Nov. 1	.....	May 2	May 12	May 20	Apr. 18	.....	Oct. 5	Nov. 8	.....	.....	
1884	Apr. 22	May 6	May 17	Apr. 1	Oct. 9	Nov. 6	.....	May 1	May 12	May 19	Apr. 29	.....	Oct. 9	Nov. 10	.....	.....	
1885	Apr. 24	May 8	May 19	Apr. 22	Sept. 29	Nov. 6	.....	Apr. 24	May 7	May 17	Apr. 24	.....	Sept. 30	Oct. 24	.....	.....	
1886	Apr. 19	Apr. 23	May 6	Apr. 13	May 19	Oct. 10	Oct. 17	Full.	Apr. 23	May 6	May 12	Apr. 15	None.	Oct. 5	Oct. 25	None.	.....
1887	Apr. 22	May 8	May 16	Apr. 10	May 22	Sept. 20	Sept. 30	Full.	Apr. 25	May 10	May 16	Apr. 28	Aug. 20	Sept. 25	Oct. 5	Full.	.....
1888	Apr. 26	May 8	May 17	Apr. 11	May 23	Oct. 1	Oct. 8	Full.	Apr. 27	May 11	May 27	Apr. 30	Sept. 1	Oct. 8	Oct. 29	Scant.	.....
1889	Apr. 23	May 7	May 10	Apr. 14	May 19	Sept. 23	Sept. 30	Full.	Apr. 23	May 8	May 11	Apr. 23	Aug. 15	Sept. 25	Oct. 9	Scant.	.....
1890	Apr. 13	Apr. 30	May 15	Apr. 8	June 3	Oct. 8	Oct. 23	Full.	Apr. 25	May 8	May 20	Apr. 24	None.	Oct. 3	Oct. 25	None.	.....
1891	Apr. 18	Apr. 29	May 10	Apr. 15	May 22	Oct. 4	Oct. 24	Full.	Apr. 21	Apr. 30	May 12	Apr. 22	Aug. 5	Oct. 8	Oct. 31	Full.	.....
1892	Apr. 20	May 4	May 17	Apr. 6	May 20	Oct. 5	Oct. 29	Full.	May 3	May 14	May 22	May 6	Aug. 20	Oct. 10	Oct. 30	Full.	.....
1893	Apr. 14	May 8	May 20	Apr. 5	June 8	Sept. 27	Oct. 23	Scant.	Apr. 26	May 12	May 22	May 5	Aug. 25	Sept. 28	Nov. 5	Scant.	.....
1894	Apr. 19	May 2	May 10	Mar. 18	None.	Oct. 2	Oct. 12	None.	Apr. 26	May 6	May 15	Apr. 25	None.	Sept. 28	Oct. 17	None.	.....
1895	Apr. 20	May 2	May 9	Apr. 5	May 22	Oct. 2	Oct. 16	Full.	Apr. 25	May 3	May 11	Apr. 27	Aug. 28	Oct. 11	Oct. 22	Scant.	.....
1896	Apr. 15	Apr. 24	May 10	Apr. 13	None.	Sept. 24	Oct. 12	None.	Apr. 17	Apr. 25	May 2	Apr. 20	Aug. 25	Oct. 6	Oct. 20	Scant.	.....
1897	Apr. 23	Apr. 29	May 10	Mar. 21	June 2	Sept. 23	Oct. 8	Scant.	Apr. 27	May 8	May 20	None.	Oct. 1	Oct. 29	None.	.....	.....
1898	Apr. 16	Apr. 23	May 13	Mar. 19	May 16	.....	.....	.....	Apr. 17	May 3	May 14	Apr. 28	.....	.....	.....	.....	.....
1899	Apr. 24	Apr. 30	May 5	Apr. 21	May 12	.....	.....	.....	Apr. 30	May 7	May 16	May 1	Apr. 29	.....	.....	.....	.....
1900	.....	.....	.....	Apr. 8	.....	.....	.....	.....	.....	.....	.....	May 2	.....	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	May 3	May 16	Apr. 1	Oct. 20	Oct. 30	.....	.....	.....	May 11	May 17	Apr. 28	Sept. 30	Oct. 22	.....	.....	.....	.....
1906	May 6	May 15	Apr. 7	May 14	Sept. 28	Oct. 22	.....	May 12	May 20	May 1	Oct. 12	Oct. 25	Nov. 1	.....	.....	.....	.....
1907	May 14	May 18	Mar. 25	Oct. 10	Oct. 20	.....	.....	.....	May 14	May 22	May 1	Oct. 29	.....	.....	.....	.....	.....
1908	May 1	May 10	Mar. 27	May 22	Oct. 27	.....	.....	.....	May 7	May 16	May 6	Apr. 20	.....	.....	.....	.....	.....
1909	May 12	May 20	Apr. 16	May 16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	Apr. 10	Apr. 20	Mar. 19	May 4	Nov. 10	Nov. 15	.....	.....	Apr. 20	May 2	May 24	May 6	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1912	Apr. 23	May 6	May 18	Apr. 6	May 25	Oct. 20	Oct. 28	Full.	Apr. 28	May 8	May 18	May 16	None.	Oct. 11	Oct. 23	None.	.....
Average	Apr. 20	May 3	May 13	Apr. 5	May 22	Oct. 6	Oct. 21	.....	Apr. 26	May 8	May 16	Apr. 28	Aug. 21	Oct. 6	Oct. 25	.....	.....
Earliest	Apr. 13	Apr. 10	Mar. 18	Apr. 20	May 4	Sept. 20	Sept. 30	.....	Apr. 20	May 2	May 2	Apr. 20	Aug. 5	Sept. 25	Oct. 5	.....	.....
Latest	Apr. 24	May 14	May 20	Apr. 22	June 8	Nov. 10	Nov. 15	.....	May 3	May 18	May 27	May 16	Sept. 1	Oct. 29	Nov. 10	.....	.....

SUGAR MAPLE (1200).

1883	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 28	May 11	May 20	May 23	.....	Oct. 9	Nov. 10	.....	.....	
1884	.....	.....	.....	.....	.....	.....	.....	.....	May 4	May 12	May 21	May 22	.....	Oct. 16	Oct. 30	.....	.....	
1885	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 18	Apr. 22	Apr. 29	May 2	None.	Nov. 1	Nov. 10	.....	.....	
1886	.....	.....	.....	.....	.....	.....	.....	.....	Apr. 23	May 3	May 14	May 20	Oct. 10	Sept. 25	Oct. 14	Full.	.....	
1887	Apr. 26	May 11	May 18	May 3	Sept. 18	Sept. 25	Oct. 12	Full.	Apr. 23	May 3	May 15	May 24	None.	Sept. 25	Oct. 10	None.	.....	
1888	Apr. 29	May 13	May 20	May 4	Sept. 26	Oct. 5	Oct. 12	Full.	Apr. 30	May 10	May 15	May 24	None.	Sept. 25	Oct. 10	None.	.....	
1889	Apr. 23	May 7	May 11	Apr. 26	Sept. 15	Sept. 30	Oct. 9	Full.	Apr. 20	May 2	May 7	May 12	Oct. 10	Oct. 8	Oct. 9	Scant.	.....	
1890	Apr. 22	May 5	May 18	Apr. 25	Sept. 20	Oct. 3	Oct. 28	Full.	Apr. 24	May 6	May 10	May 24	Sept. 10	Oct. 10	Oct. 28	Full.	.....	
1891	Apr. 21	Apr. 30	May 14	Apr. 23	Aug. 25	Oct. 5	Oct. 31	Full.	Apr. 19	Apr. 22	May 2	May 13	Oct. 10	Oct. 8	Oct. 31	Full.	.....	
1892	Apr. 18	May 5	May 20	May 5	Aug. 30	Oct. 6	Oct. 18	Full.	Apr. 21	May 2	May 14	May 19	Sept. 20	Oct. 6	Oct. 20	Scant.	.....	
1893	Apr. 16	May 6	May 19	Apr. 13	Aug. 16	Sept. 28	Oct. 27	Full.	Apr. 20	May 7	May 15	May 24	Sept. 28	Sept. 26	Oct. 15	Scant.	.....	
1894	Apr. 25	May 4	May 13	Apr. 26	Aug. 25	Oct. 5	Oct. 16	Full.	Apr. 20	Apr. 27	May 4	May 10	Sept. 20	Sept. 26	Oct. 15	Scant.	.....	
1895	Apr. 26	May 5	May 12	Apr. 24	Aug. 25	Oct. 11	Oct. 18	Full.	Apr. 23	Apr. 28	May 6	May 9	None.	Oct. 11	Oct. 18	None.	.....	
1896	Apr. 20	Apr. 24	May 1	Apr. 21	Aug. 30	Oct. 8	Oct. 18	Full.	Apr. 14	Apr. 22	May 2	May 7	Sept. 10	Sept. 24	Oct. 30	None.	.....	
1897	Apr. 26	May 4	May 12	May 4	None.	Sept. 25	Oct. 10	None.	Apr. 23	Apr. 28	May 7	May 12	Sept. 10	Oct. 25	Nov. 12	Scant.	.....	
1898	Apr. 17	Apr. 30	May 15	May 2	Apr. 30	May 5	May 2	.....	Apr. 17	Apr. 27	May 8	May 14	.....	.....	.....	.....	.....	
1899	Apr. 20	Apr. 30	May 5	Apr. 30	May 7	May 7	May 2	.....	Apr. 23	Apr. 28	May 3	May 6	May 7	.....	.....	.....	.....	
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1905	May 10	May 18	Apr. 28	.....	Sept. 28	Oct. 16	.....	May 4	May 12	May 17	Sept. 28	.....	Oct. 22	.....	.....	.....	.....	
1906	May 6	May 16	Apr. 29	.....	Oct. 15	Oct. 25	.....	May 3	May 17	May 22	May 30	.....	Oct. 19	Oct. 30	.....	.....	.....	
1907	May 14	May 23	May 1	.....	Oct. 10	Oct. 25	.....	May 2	May 11	May 15	May 15	.....	Nov. 8	.....	.....	.....	.....	
1908	May 3	May 14	May 8	.....	Oct. 25	.....	.....	May 10	May 23	May 24	May 24	.....	.....	.....	.....	.....	.....	
1909	May 16	May 23	May 6	.....	.....	.....	.....	Apr. 12	Apr. 24	May 10	May 10	.....	.....	.....	.....	.....	.....	
1910	May 16	May 2	Apr. 8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1912	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Average	Apr. 22	May 4	May 14	Apr. 28	Sept. 1	Oct. 5	Oct. 18	.....	Apr. 23	May 2	May 10	May 15	Sept. 26	Oct. 12	Oct. 25	Oct. 25	.....	.....
Earliest	Apr. 16	Apr. 16	May 1	Apr. 8	Aug. 16	Sept. 25	Oct. 9	.....	Apr. 14	Apr. 12	May 23	May 30	Sept. 24	Sept. 10	Sept. 30	Oct. 25	.....	.....
Latest	Apr. 29	May 10	May 23	May 8	Sept. 26	Oct. 25	Oct. 31	.....	May 4	May 17	May 23							

## SUPPLEMENT NO. 2.

TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs, and vines, 1883 to 1912, inclusive—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

## FIVE-LEAVED CREEPER (1220).

## FLOWERING DOGWOOD

1883.....									May 10	May 23	June 1	May 20			Sept. 28	Oct. 16	
1884.....	May 7	May 16	May 23	June 23		Oct. 5	Nov. 8		May 9	May 17	June 26	May 18			Oct. 9	Nov. 12	
1885.....	Apr. 26	May 13	May 24	June 25		Oct. 3	Oct. 23		May 13	May 26	June 5	None.			Oct. 5	Oct. 26	
1886.....	Apr. 19	Apr. 29	May 13	June 15	Aug. 25	Sept. 28	Oct. 14	Few.	Apr. 28	May 6	May 21	May 7			Sept. 27	Oct. 10	Oct. 16
1887.....	May 7	May 12	May 20	June 20	Sept. 5	Sept. 25	Oct. 10	Few.	May 3	May 20	May 21	May 11			Sept. 12	Oct. 10	Oct. 18
1888.....	Apr. 28	May 14	May 26	June 23	Sept. 26	Sept. 30	Oct. 10	Full.	May 5	May 20	May 28	May 15			Sept. 20	Sept. 30	Oct. 14
1889.....	Apr. 23	May 8	May 12	July 4	Sept. 2	Sept. 25	Oct. 9	Full.	Apr. 27	May 12	May 18	May 10			Oct. 15	Oct. 8	Oct. 10
1890.....	Apr. 28	May 12	May 25	June 29	Sept. 18	Sept. 30	Oct. 14	Scant.	May 1	May 12	May 30	May 17			Sept. 25	Oct. 2	Oct. 15
1891.....	Apr. 22	May 1	May 15	June 20	Sept. 30	Oct. 14	Oct. 31	Scant.	Apr. 22	May 10	May 23	May 15			Oct. 15	Oct. 23	Oct. 31
1892.....	Apr. 27	May 12	May 24	June 22	Sept. 5	Oct. 6	Oct. 15	Full.	May 15	May 24	June 6	May 25			Oct. 2	Oct. 8	Oct. 18
1893.....	Apr. 24	May 15	May 26	June 30	Sept. 20	Sept. 28	Oct. 3	Full.	May 14	May 20	June 1	May 24			Oct. 16	Oct. 27	None.
1894.....	Apr. 28	May 7	May 12	June 24	Aug. 23	Sept. 26	Oct. 16	Full.	May 28	May 7	May 22	May 10			Sept. 20	Oct. 3	Oct. 16
1895.....	Apr. 26	May 3	May 11	July 4	Aug. 24	Sept. 27	Oct. 16	Scant.	May 4	May 12	May 24	None.			None.	Oct. 11	Oct. 20
1896.....	Apr. 19	Apr. 26	May 8	June 14	Sept. 5	Oct. 8	Oct. 17	Full.	Apr. 20	May 2	May 16	May 6			None.	Sept. 24	Oct. 12
1897.....	Apr. 26	May 8	May 22	July 8	Oct. 5	Oct. 5	Oct. 18	Full.	Apr. 28	May 9	May 25	May 26			None.	Oct. 28	Nov. 15
1898.....	Apr. 21	May 4	May 18	June 22					May 3	May 11	May 28	May 22					
1899.....	Apr. 29	May 4	May 13	June 18					Apr. 27	May 4	May 17	May 6					
1900.....				June 24								May 17					
1901.....				June 27								May 23					
1902.....																	
1903.....																	
1904.....																	
1905.....		May 10	May 21	June 20	Sept. 30				May 6	May 18	May 19					Oct. 16	
1906.....		May 12	May 24						May 17	May 25	May 14						
1907.....		May 28	June 6						June 1	June 14	May 30						
1908.....		May 12	May 20						Nov. 20	Nov. 28						Oct. 30	Nov. 10
1909.....		May 10	May 20														
1910.....																	
1911.....																	
1912.....	May 6	May 10	May 21	July 4	Sept. 20	Oct. 11	Oct. 28	Full.	May 4	May 12	May 22	May 20					
Average.....	Apr. 27	May 9	May 20	June 25	Sept. 13	Oct. 6	Oct. 20	Full.	May 3	May 14	May 26	May 17			Sept. 28	Oct. 10	Oct. 22
Earliest.....	Apr. 19	Apr. 26	May 8	June 6	July 14	Aug. 24	Sept. 25	Oct. 3	Apr. 20	May 2	May 16	May 6			Sept. 12	Oct. 15	Oct. 10
Latest.....	May 7	May 28	June 6	July 8	Oct. 5	Nov. 20	Nov. 28		May 15	June 1	June 14	May 30			Oct. 15	Oct. 30	Nov. 15

## KINNIKINNIK (1363).

## BLACK HUCKLEBERRY (1393).

1883.....									May 13	May 21	May 27	May 30			Sept. 20	Oct. 15	
1884.....									May 1	May 16	May 24	May 20			Sept. 20	Oct. 20	Oct. 25
1885.....	Apr. 23	May 10	May 24	June 25		Oct. 6	Oct. 31										
1886.....	Apr. 16	May 4	May 16	June 6	Aug. 10	Oct. 24	Nov. 4	Full.									
1887.....	Apr. 16	May 1	May 14	May 25	Aug. 15	Sept. 25	Oct. 15	Full.									
1888.....	Apr. 23	May 11	May 26	June 21	Sept. 5	Oct. 10	Oct. 29	Full.									
1889.....	Apr. 22	May 8	May 13	June 21	Sept. 10	Sept. 30	Oct. 9	Full.									
1890.....	Apr. 14	May 7	May 20	June 15	Aug. 20	Oct. 1	Oct. 18	Full.									
1891.....	Apr. 20	Apr. 30	May 15	June 19	Aug. 30	Oct. 1	Oct. 20	Full.									
1892.....	May 4	May 17	May 27	June 22	Aug. 25	Oct. 6	Oct. 18	Scant.									
1893.....	Apr. 12	May 8	May 18	June 19	None.	Oct. 16	Oct. 25	None.									
1894.....	Apr. 26	May 6	May 20	June 12	Aug. 28	Oct. 15	Oct. 17	Scant.									
1895.....	Apr. 26	May 7	May 16	June 18	Aug. 25	Oct. 23	Oct. 30	Scant.									
1896.....	Apr. 17	Apr. 27	May 2	May 28	Aug. 28	Oct. 6	Oct. 15	Scant.									
1897.....	Apr. 22	May 2	May 13	June 20	Aug. 27	Sept. 25	Oct. 8	Scant.									
1898.....	Apr. 9	Apr. 19	May 9	June 9													
1899.....				June 8													
1900.....				June 14													
1901.....																	
1902.....																	
1903.....																	
1904.....																	
1905.....																	
1906.....		May 16	May 28	May 23													
1907.....																	
1908.....		May 14	May 23						Nov. 8	Nov. 14							
1909.....																	
1910.....																	
1911.....																	
1912.....	May 5	May 15	May 26	June 1	Sept. 3	Oct. 20	Oct. 28	Full.									
Average.....	Apr. 21	May 7	May 18	June 12	Aug. 27	Oct. 9	Oct. 23	-----	May 2	May 13	May 22	May 18			July 21	Sept. 29	Oct. 20
Earliest.....	Apr. 9	Apr. 19	May 12	May 23	Aug. 10	Sept. 25	Oct. 8	-----	Apr. 18	Apr. 25	May 5	May 5			July 8	Sept. 20	Oct. 14
Latest.....	May 5	May 17	May 28	June 25	Sept. 10	Nov. 8	Nov. 14		May 13	May 30	June 10	May 30			Aug. 4	Oct. 10	Oct. 25

Not full.  
Full.  
Scant.  
Not full.  
Full.  
Scant.  
None.

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs, and vines, 1883 to 1912, inclusive—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 23.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful, or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful, or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

BLUE HUCKLEBERRY (1398).

1883																
1884																
1885																
1886																
1887	May 5	May 11	May 22	May 19	July 18	Sept. 25	Oct. 25	Full...								
1888																
1889	Apr. 29	May 8	May 13	May 13	July 20	Sept. 25	Oct. 30	Full...								
1890	May 8	May 12	May 22	May 12	July 19	Oct. 1	Oct. 18	Full...								
1891	Apr. 22	May 1	May 14	May 4	July 16	Sept. 30	Oct. 15	Full...								
1892				May 23	July 28											
1893																
1894																
1895																
1896																
1897	Apr. 19	Apr. 25	May 5	May 5	July 2	Oct. 2	Oct. 15	Full...								
1898	May 3	May 13	May 22	May 15	July 20	do...	Oct. 16	Full...								
1899																
1900																
1901																
1902																
1903																
1904																
1905	Apr. 25	May 2	May 14	May 14	July 22	Oct. 10	Oct. 18	Full...								
1906	May 8	May 17	May 26	May 22	July 20			Scant...								
1907		May 31	June 10	May 30	Aug. 2	Oct. 28		Scant...								
1908		May 12	May 19	May 19	Aug. 2			Full...								
1909		May 26	do...	do...	July 20			Scant...								
1910								None...								
1911																
1912																
Average	Apr. 30	May 11	May 20	May 16	July 19	Oct. 1	Oct. 20	.....								
Earliest	Apr. 19	Apr. 25	May 5	May 4	July 2	Sept. 25	Oct. 15	.....								
Latest	May 8	May 31	June 10	May 30	Aug. 2	Oct. 28	Oct. 30	.....								

PERSIMMON (1416).

1883																
1884																
1885																
1886																
1887	May 5	May 11	May 22	May 19	July 18	Sept. 25	Oct. 25	Full...								
1888																
1889	Apr. 29	May 8	May 13	May 13	July 20	Sept. 25	Oct. 30	Full...								
1890	May 8	May 12	May 22	May 12	July 19	Oct. 1	Oct. 18	Full...								
1891	Apr. 22	May 1	May 14	May 4	July 16	Sept. 30	Oct. 15	Full...								
1892				May 23	July 28											
1893																
1894																
1895																
1896																
1897	Apr. 19	Apr. 25	May 5	May 5	July 2	Oct. 2	Oct. 16	Full...								
1898	May 3	May 13	May 22	May 15	July 20	do...	Oct. 18	Full...								
1899																
1900																
1901																
1902																
1903																
1904																
1905																
1906																
1907																
1908																
1909																
1910																
1911																
1912																
Average	Apr. 30	May 11	May 20	May 16	July 19	Oct. 1	Oct. 20	.....								
Earliest	Apr. 19	Apr. 25	May 5	May 4	July 2	Sept. 25	Oct. 15	.....								
Latest	May 8	May 31	June 10	May 30	Aug. 2	Oct. 28	Oct. 30	.....								

WHITE ASH (1417).

1883																
1884																
1885																
1886																
1887	Apr. 25	May 5	May 25	May 24	Aug. 15	Sept. 30	Oct. 5	Oct. 15	Full...							
1888	May 6	May 15	May 25	None...	None...	Sept. 25	Oct. 2	Oct. 12	None...							
1889	May 11	May 22	May 30	May 5	July 2	Sept. 20	Oct. 5	Oct. 15	Scant...							
1890	Apr. 30	May 8	May 22	May 15	None...	Sept. 20	Oct. 28	Oct. 2	None...							
1891	Apr. 28	May 12	May 24	None...	None...	Oct. 1	Oct. 10	Oct. 20	None...							
1892																
1893	Apr. 29	May 10	May 22	May 10	Sept. 30	Sept. 28	Oct. 16	Oct. 12	Scant...							
1894	May 14	May 24	June 4	May 26	None...	Sept. 30	Oct. 5	Oct. 15	Full...							
1895	May 12	May 19	May 30	May 24	Sept. 1	Sept. 27	Oct. 6	Oct. 15	Scant...							
1896	May 2	May 9	May 22	May 10	Sept. 5	Oct. 27	Oct. 8	Oct. 15	None...							
1897	Apr. 29	May 5	May 13	May 3	None...	Sept. 24	Oct. 2	Oct. 10	None...							
1898	Apr. 20	Apr. 28	May 10	Aug. 21	Sept. 24	Sept. 24	Oct. 2	Oct. 10	None...							
1899	May 5	May 13	May 22	May 12	Aug. 30	Sept. 24	Oct. 2	Oct. 10	Full...							
1900	May 12	May 18	May 27	None...	None...	Sept. 24	Oct. 2	Oct. 10	None...							
1901																
1902																
1903																
1904																
1905																
1906																
1907																
1908																
1909																
1910																
1911																
1912																
Average	May 7	May 15	May 28	None...	None...	Oct. 11	Oct. 20	None...								
Earliest	May 5	May 15	May 26	May 13	Aug. 21	Oct. 2	Oct. 11	Oct. 20	None...							
Latest	May 18	June 4	June 15	June 16	Sept. 30	Sept. 28	Oct. 25	Oct. 28	None...							

BLACK ASH (1421).

1883																

## SUPPLEMENT NO. 2.

TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs and vines, 1883 to 1912, inclusive—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

## TRUMPET CREEPER (1666).

## BUTTON BUSH (1688).

1883....																
1884....	May 18	May 26	May 31	July 8		Oct. 9	Nov. 10		May 10	May 25	June 5	July 15		Oct. 1	Oct. 25	
1885....	May 25	May 31	June 4	July 13		Sept. 26	Oct. 14		May 19	May 27	June 6	July 22		Oct. 3	Oct. 26	
1886....	Apr. 28	May 8	May 21	June 22	Oct. 25	Oct. 14	Oct. 24	Full...	Apr. 23	Apr. 30	May 22	July 25	Sept. 2	Oct. 5	Oct. 24	Full.
1887....	May 10	May 16	May 28	June 23	Sept. 20	Sept. 25	Oct. 5	Full...	May 13	May 19	May 24	July 9	Sept. 30	Sept. 25	Oct. 15	Full.
1888....	May 25	May 31	June 12	July 4	Oct. 1	Oct. 1	Oct. 8	Full...	May 24	May 30	June 12	June 20	Frozen...	Oct. 5	Oct. 18	Full.
1889....	May 10	May 13	May 22	July 7	Sept. 20	Sept. 25	Oct. 3	Full...	May 8	May 13	May 17	July 25	None...	Sept. 25	Oct. 5	None.
1890....	May 22	May 28	June 4	June 30	Oct. 8	Oct. 10	Oct. 18	Full...	May 22	May 28	June 10	July 18	Oct. 10	Oct. 8	Oct. 20	Full.
1891....	May 10	May 21	June 3	July 10	Oct. 10	Oct. 7	Oct. 31	Scant...	May 6	May 14	June 4	July 14	Oct. 3	Oct. 6	Oct. 15	Scant.
1892....	May 24	June 1	June 12	July 7	Sept. 30	Oct. 2	Oct. 2	Full...				July 26	Oct. 6	Oct. 18	Scant.	
1893....	May 22	June 6	June 18	July 9	Sept. 16	Oct. 2	Oct. 15	Full...								
1894....	May 6	May 15	May 27	June 30	Sept. 15	Oct. 12	Oct. 17	Scant...					July 13			
1895....	May 11	May 12	May 30	June 21	Aug. 30	Oct. 11	Oct. 20	Scant...					July 28			
1896....	May 1	May 10	May 18	June 14	Sept. 10	Sept. 24	Oct. 1	Full...	Apr. 30	May 7	May 21	July 2	None...	Oct. 6	Oct. 13	None.
1897....	May 16	May 22	June 4	July 10	None...	Oct. 2	Oct. 12	None...	May 11	May 19	June 18	July 15	None...	Sept. 22	Oct. 2	None.
1898....	May 9	May 18	May 28	June 28					May 12	May 21	June 1	July 5				
1899....	May 2	May 10	May 20	June 23					May 2	May 8	May 20	July 17				
1900....				June 25												
1901....				July 1									July 13			
1902....																
1903....																
1904....																
1905....													May 16	June 2	July 12	Oct. 22
1906....													May 26			
1907....															Sept. 27	Oct. 12
1908....													May 26			
1909....																
1910....																
1911....																
1912....	May 13	May 21	May 31	July 6	Sept. 30	Oct. 6	Oct. 15	Scant...								
Average	May 13	May 21	May 28	July 1	Sept. 25	Oct. 4	Oct. 15	.....	May 10	May 18	June 1	June 14	Sept. 26	Oct. 2	Oct. 16	
Earliest	Apr. 28	May 8	May 18	June 14	Aug. 30	Sept. 24	Oct. 1	.....	Apr. 23	Apr. 30	May 17	June 20	Sept. 2	Sept. 22	Oct. 2	
Latest	May 25	June 6	June 18	July 13	Oct. 25	Oct. 14	Nov. 10	.....	May 24	May 30	June 18	July 28	Oct. 10	Oct. 8	Oct. 26	

## COMMON ELDER (1703).

## SNOW BALL (1706).

1883....	Apr. 21	May 2	May 12	June 29		Sept. 25	Oct. 10									
1884....	Apr. 15	Apr. 30	May 12	June 20		Oct. 9	Oct. 31									
1885....	Apr. 24	May 19	May 27	June 28		Oct. 3	Oct. 23									
1886....	Mar. 28	Apr. 25	May 6	June 14	Aug. 2	Sept. 30	Oct. 23	Full...	Apr. 20	Apr. 26	May 6	May 21	None...	Oct. 13	Nov. 7	None.
1887....	Apr. 20	May 5	May 13	June 16	Aug. 15	Sept. 25	Oct. 1	Full...	Apr. 25	May 5	May 18	May 22	None...	Nov. 3	Nov. 16	None.
1888....	Apr. 26	May 11	May 16	June 24	Sept. 1	Oct. 15	Oct. 30	Full...	Apr. 28	May 13	May 21	June 3	None...	Oct. 16	Nov. 5	None.
1889....	Apr. 15	May 6	May 11	June 21	Aug. 14	Sept. 30	Oct. 9	Full...	May 21	May 8	May 12	May 19	None...	Oct. 8	Oct. 10	None.
1890....	Apr. 10	Apr. 25	May 9	June 16	Aug. 18	Oct. 8	Oct. 25	Full...	Apr. 25	May 1	May 8	May 28	None...	Oct. 25	Nov. 6	None.
1891....	Apr. 14	Apr. 28	May 12	June 18	Aug. 25	Oct. 6	Oct. 24	Full...	Apr. 20	Apr. 30	May 15	May 24	None...	Oct. 23	Oct. 31	None.
1892....	Apr. 16	May 4	May 25	June 23	Aug. 18	Oct. 18	Nov. 4	Full...	May 1	May 14	May 20	May 31	None...	Oct. 18	Nov. 1	None.
1893....	Apr. 5	Apr. 27	May 16	June 25	Aug. 25	Oct. 16	Nov. 5	Full...	Apr. 14	Apr. 30	May 12	May 30	None...	Oct. 16	Nov. 5	None.
1894....	Apr. 12	Apr. 28	May 8	June 18	Aug. 18	Oct. 5	Oct. 17	None...	Apr. 14	Apr. 30	May 12	May 21	None...	Oct. 8	Oct. 17	None.
1895....	Apr. 18	May 2	May 9	June 20	Aug. 12	Oct. 3	Oct. 20	None...	May 2	May 7	May 12	May 30	Oct. 11	Oct. 11	Oct. 20	None.
1896....	Apr. 14	Apr. 23	Apr. 30	June 5	Aug. 8	Oct. 19	Oct. 24	None...	Apr. 25	Apr. 30	May 6	May 11	Oct. 11	Oct. 10	Oct. 26	None.
1897....	Apr. 6	Apr. 23	May 23	June 25	Aug. 26	Oct. 4	Oct. 18	None...	Apr. 27	May 2	May 14	May 30	Oct. 11	Oct. 2	Oct. 18	None.
1898....	Mar. 30	Apr. 19	May 9	June 17					Apr. 19	May 11	May 13	May 23	Oct. 11			
1899....	Apr. 22	Apr. 30	May 8	June 12					Apr. 27	May 1	May 9	May 26	Oct. 11			
1900....				June 13												
1901....				June 24												
1902....																
1903....																
1904....																
1905....													May 8	May 19	May 23	None.
1906....													May 3	May 10	May 23	None.
1907....													May 7	May 17	June 8	None...
1908....													May 15	May 25	May 27	None...
1909....													May 20	May 28	May 30	None...
1910....													Apr. 25	May 8	May 14	None.
1911....																
1912....													May 2	May 11	May 18	May 25
Average	Apr. 14	Apr. 30	May 12	June 18	Aug. 18	Oct. 8	Oct. 22	.....	Apr. 25	May 5	May 14	May 26	Oct. 16	Oct. 29		
Earliest	Mar. 28	Apr. 12	Apr. 25	May 18	Aug. 2	Sept. 25	Oct. 1	.....	Apr. 14	Apr. 25	May 6	May 11	Oct. 2	Oct. 10		
Latest	Apr. 26	May 19	May 27	July 1	Sept. 10	Oct. 30	Nov. 5	.....	May 3	May 20	May 29	June 8	Nov. 3	Nov. 16		

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 3.—*Phenological observations at Wauseon, Ohio, on 48 different forest trees, shrubs and vines, 1883 to 1912, inclusive—Concluded.*

[The numbers following the common names refer to the numbers on pp. 26 to 28.]

Year.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.	Buds start.	First fully formed leaf.	In full leaf.	In blossom.	Fruit ripe.	Complete change of foliage.	Divested of leaves.	Seeds, plentiful or scant.
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

BLACK HAW (1712).

1883	May 2	May 11	May 18	June 3	Sept. 20	Oct. 20	.....	.....	Apr. 20	May 6	May 16	June 13	.....	.....	.....	.....
1884	Apr. 26	May 6	May 15	May 27	.....	Oct. 9	Oct. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	Apr. 23	May 8	May 17	May 30	Sept. 18	Oct. 29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	Apr. 16	Apr. 22	Apr. 29	May 13	Oct. 2	Oct. 15	Oct. 24	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1887	Apr. 30	May 3	May 12	May 24	Sept. 15	Sept. 20	Sept. 30	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1888	May 2	May 10	May 14	May 20	Sept. 15	Oct. 2	Oct. 13	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1889	Apr. 23	Apr. 29	May 8	May 18	Sept. 30	Sept. 30	Oct. 9	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1890	Apr. 15	Apr. 28	May 3	June 1	Sept. 30	Oct. 2	Oct. 15	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1891	Apr. 17	Apr. 23	May 1	May 20	Oct. 15	Oct. 8	Oct. 25	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1892	Apr. 16	May 8	May 20	June 6	Oct. 8	Oct. 24	Scant...	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	Apr. 11	Apr. 30	May 13	May 31	Oct. 3	Oct. 5	Oct. 17	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1894	Apr. 12	Apr. 23	May 1	May 23	Sept. 30	Oct. 5	Oct. 16	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1895	Apr. 20	Apr. 30	May 6	May 25	Oct. 6	Oct. 11	Oct. 25	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1896	Apr. 14	Apr. 20	May 27	May 9	Sept. 16	Oct. 2	Oct. 14	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1897	Apr. 21	Apr. 26	May 8	June 6	Sept. 30	Oct. 4	Oct. 18	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1898	Apr. 14	Apr. 21	May 4	May 23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1899	Apr. 26	May 2	May 14	June 14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1912	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Average	Apr. 20	May 1	May 9	May 25	Sept. 27	Oct. 4	Oct. 19	.....	.....	.....	.....	.....	.....	.....	.....	.....
Earliest	Apr. 11	Apr. 20	Apr. 27	May 9	Sept. 15	Sept. 18	Sept. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....
Latest	May 2	May 11	May 26	June 14	Oct. 15	Oct. 28	Oct. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....

TRUMPET HONEYSUCKLE (1723).

1883	May 2	May 11	May 18	June 3	Sept. 20	Oct. 20	.....	.....	Apr. 20	May 6	May 16	June 13	.....	.....	.....	.....
1884	Apr. 26	May 6	May 15	May 27	.....	Oct. 9	Oct. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	Apr. 23	May 8	May 17	May 30	Sept. 18	Oct. 29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	Apr. 16	Apr. 22	Apr. 29	May 13	Oct. 2	Oct. 15	Oct. 24	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1887	Apr. 30	May 3	May 12	May 24	Sept. 15	Sept. 20	Sept. 30	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1888	May 2	May 10	May 14	May 20	Sept. 15	Oct. 2	Oct. 13	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1889	Apr. 23	Apr. 29	May 8	May 18	Sept. 30	Sept. 30	Oct. 9	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1890	Apr. 15	Apr. 28	May 3	June 1	Sept. 30	Oct. 2	Oct. 15	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1891	Apr. 17	Apr. 23	May 1	May 20	Oct. 15	Oct. 8	Oct. 25	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1892	Apr. 16	May 8	May 20	June 6	Oct. 8	Oct. 24	Scant...	.....	.....	.....	.....	.....	.....	.....	.....	.....
1893	Apr. 11	Apr. 30	May 13	May 31	Oct. 3	Oct. 5	Oct. 17	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1894	Apr. 12	Apr. 23	May 1	May 23	Sept. 30	Oct. 5	Oct. 16	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1895	Apr. 20	Apr. 30	May 6	May 25	Oct. 6	Oct. 11	Oct. 25	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1896	Apr. 14	Apr. 20	May 27	May 9	Sept. 16	Oct. 2	Oct. 14	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1897	Apr. 21	Apr. 26	May 8	June 6	Sept. 6	Sept. 18	Sept. 30	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1898	Apr. 14	Apr. 21	May 4	May 23	Sept. 15	Oct. 2	Oct. 18	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1899	Apr. 26	May 2	May 14	June 14	Oct. 15	Oct. 28	Oct. 30	Full...	.....	.....	.....	.....	.....	.....	.....	.....
1900	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1901	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1902	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1903	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1905	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1908	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1910	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1911	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1912	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Average	Apr. 20	May 1	May 9	May 25	Sept. 27	Oct. 4	Oct. 19	.....	.....	.....	.....	.....	.....	.....	.....	.....
Earliest	Apr. 11	Apr. 20	Apr. 27	May 9	Sept. 15	Sept. 18	Sept. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....
Latest	May 2	May 11	May 26	June 14	Oct. 15	Oct. 28	Oct. 30	.....	.....	.....	.....	.....	.....	.....	.....	.....

BUSH HONEYSUCKLE (1728).

1883	May 2	May 12	May 20	July 15	Sept. 10	Nov. 3	Nov. 9	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1884	Mar. 30	Apr. 25	May 4	May 23	.....	Oct. 9	Oct. 25	.....	.....	.....	.....	.....	.....	.....	.....	.....
1885	Apr. 10	Apr. 26	May 7	May 28	.....	Sept. 20	Oct. 8	.....	.....	.....	.....	.....	.....	.....	.....	.....
1886	Mar. 19	Apr. 16	Apr. 24	May 11	July 12	Sept. 27	Oct. 13	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1887	Apr. 7	Apr. 18	May 1	May 17	July 13	Sept. 25	Oct. 1	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1888	Apr. 2	Apr. 24	Apr. 30	May 26	July 20	Sept. 20	Oct. 2	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1889	Mar. 23	Apr. 16	Apr. 30	May 12	None...	Sept. 20	Oct. 5	None...	.....	.....	.....	.....	.....	.....	.....	.....
1890	Mar. 21	Apr. 11	Apr. 23	May 24	July 22	Sept. 30	Oct. 15	Scant...	.....	.....	.....	.....	.....	.....	.....	.....
1891	Apr. 14	Apr. 19	Apr. 30	June 13	Sept. 10	Oct. 23	Nov. 16									

## SUPPLEMENT NO. 2.

TABLE 4.—*Dates of blossoming at Wauseon, Ohio, for 114 different plants, 1883 to 1912.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Orchard grass (234).	Wire grass (236).	June grass (237).	Chess (264).	Indian turnip (463).	Green dragon (484).	Canada lily (520).	Adder's-tongue, yellow (522).	Adder's-tongue, white (523).	Tulip.	False Solomon's seal (531).	Smooth Solomon's seal (533).	Wake robin (543).	Crocus.
1883.														
1884.														
1885.														
1886.														
1887.														
1888.														
1889.														
1890.														
1891.	June 11	June 22	May 29											
1892.	June 10	June 18	June 1											
1893.	June 8	June 26	June 2											
1894.	May 31	June 18	May 26											
1895.	June 5	June 22	May 29											
1896.	May 19	June 10	May 14											
1897.	June 9	June 23	June 3											
1898.	June 2	June 20	May 27											
1899.	June 5	June 20	May 26											
1900.	June 3	June 24	May 27											
1901.	June 6	June 20	June 6											
1902.														
1903.														
1904.														
1905.	June 9	June 28	May 27											
1906.	May 31	July 6	May 25											
1907.	June 17	July 12	June 13											
1908.	May 28	June 16	May 28											
1909.	June 7	June 24	June 2											
1910.	June 16	June 24	June 9											
1911.	May 26	June 8	May 25											
1912.	June 6	June 17	May 30											
Average.	June 5	June 22	June 1											
Earliest.	May 19	June 8	May 14											
Latest.	June 17	July 12	June 13											

Year.	Blue flag (556).	Sheep sorrel (695).	Smartweed (714).	Water smartweed (715).	Lamb's-quarters (729).	Spring beauty (759).	Purslane (762).	Corn cockle (763).	Wild columbine (823).	Garden columbine (824).	Dwarf larkspur (829).	Hepatica (836).	Yellow water crowfoot (842).	Mandrake (876).	Bloodroot (878).
1883.															
1884.															
1885.															
1886.															
1887.															
1888.															
1889.															
1890.															
1891.	June 6	May 15	July 31												
1892.		May 20	July 24												
1893.		May 23													
1894.		May 14	July 18												
1895.		May 26	Aug. 11												
1896.		May 30	June 18												
1897.		May 23	June 18												
1898.		May 15	July 3												
1899.		May 31	May 17	July 25											
1900.		June 2	May 14	June 10											
		May 31	May 14												
1901.		June 15													
1902.															
1903.															
1904.															
1905.															
1906.															
1907.															
1908.															
1909.															
1910.															
1911.															
1912.															
Average.	June 7	May 21	July 20	Aug. 1	Aug. 4	Apr. 17	July 14	June 9	May 16	May 21	June 20	Apr. 13	May 1	May 10	Apr. 25
Earliest.	May 30	May 14	June 10	July 19	July 21	Apr. 4	June 18	June 1	May 5	May 10	June 3	Mar. 29	May 8	May 25	Apr. 30
Latest.	June 15	June 15	Aug. 16	Aug. 12	Aug. 27	Apr. 27	Aug. 20	June 15	June 2	June 3	July 5	Apr. 28	May 10	May 25	Apr. 24

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 4.—*Dates of blossoming at Wauseon, Ohio, for 114 different plants, 1883 to 1912—Continued.*

[The numbers following the common names refer to the numbers of the list on pp. 26 to 28.]

Year.	Dutchman's breeches (879).	Bleeding Heart (8817).	White mustard (885).	Black mustard (886).	Horse Radish (907).	Bitter Cress (9137).	Pepper Root (916).	Shepherd's purse (920).	Mock orange (964).	Five finger (1003).	Wild lupine (1065).	Air-flax (1066).	White sweet clover (1068).	Yellow sweet clover (1069).	Low hop clover (1071).
1883															
1884															
1885															
1886															
1887															
1888															
1889															
1890															
1891	May 2														
1892	May 6	May 23	June 8	May 21	Apr. 21	Apr. 22	Apr. 14	June 6	May 21	May 21			July 1		
1893	May 18	May 28	May 28	May 23	Apr. 13	Apr. 25	Apr. 4	June 4	May 25	May 25			June 12		
1894	May 2	May 14	May 17	May 11	Apr. 15	Apr. 21	Apr. 3	June 2	May 24	May 24			June 8		
1895	May 5	May 26	June 3	May 9	Apr. 24	Apr. 20	Apr. 14	June 8	May 16	May 13			June 19		
1896	May 12	May 21	May 13	May 4	Apr. 18	Apr. 19	Apr. 18	June 10	May 20	May 11			June 25		
1897	May 11	June 12	May 29	May 18	Apr. 21	Apr. 25	Apr. 19	June 16	May 14	May 8			June 23		
1898	May 7	May 1	June 5	May 12	Apr. 24	Apr. 25	Apr. 19	June 28	May 27	May 25			June 18		
1899	May 5	June 3	June 8	May 6	Apr. 29	Apr. 25	Apr. 25	June 6	May 20	May 18			June 23		
1900	May 12	May 31	May 28	May 17	May 2	Apr. 27	Apr. 25	June 15	May 12	May 16			June 14		
1901	May 13	June 6	June 18	May 12				June 7	May 23	May 31			June 24		
1902															
1903															
1904															
1905															
1906	Apr. 29	May 15	June 7	June 14	Apr. 10	Apr. 28	Apr. 28	May 31	May 15	May 20			June 18		
1907	Apr. 29	May 4	June 6	June 14	Apr. 19	Apr. 18	Apr. 26	May 29	May 22	May 20			June 20		
1908	May 3	June 10	June 21	July 2				Mar. 28	June 12	June 6			July 17		
1909	Apr. 20	May 9	June 13	June 8	Apr. 22	Apr. 30	Apr. 13	May 30	May 20	June 24			June 8		
1910	Apr. 26	May 13	June 8	June 21	June 2	May 1	Apr. 11	Apr. 5	June 7	June 6			July 2		
1911								June 1	June 15	June 14			June 23		
1912	Apr. 27	May 11	June 3	June 8	May 31	Apr. 29	Apr. 29	May 28	May 14	May 12			June 28		
Average.	Apr. 28	May 9	June 2	June 8	May 19	Apr. 20	Apr. 23	May 16	May 22	May 23			June 25		
Earliest.	Apr. 4	Apr. 25	May 21	May 13	May 4	Apr. 10	Apr. 11	Mar. 28	May 11	May 8			June 24		
Latest.	May 3	June 10	June 21	July 2	June 6	May 2	May 2	June 15	June 6	June 6			June 8		

Year.	Alsike clover (1077).	White clover (1078).	Tick trefoli (1089).	Cranesbill (1133).	Yellow wood sorrel (1120).	Larkspur violet (1261).	Hooded blue violet (1262).	Arrow-leaf violet (1263).	Bird-foot violet (1265).	Sweet white violet (1267).	Lance-leaf violet (1269).	Yellow violet (1272).	Canada violet (1273).	Cream-colored violet (1274).	
1883															
1884															
1885															
1886															
1887															
1888															
1889															
1890															
1891	June 15	May 30	July 26	May 18	Apr. 22	Apr. 27	Apr. 30	Apr. 27	May 3	May 3					
1892	June 15	June 3	July 26	May 22	June 15	Apr. 23	May 3	May 3	May 8	May 2					
1893	June 8	June 2	July 20	May 21	June 5	May 2	May 8	May 9	May 3	May 3					
1894	June 12	May 29	July 24	May 5	June 4	Apr. 17	Apr. 26	Apr. 27	Apr. 27	Apr. 17					
1895	May 31	May 28	July 29	May 8	June 11	Apr. 26	Apr. 29	May 1	May 1	Apr. 29					
1896	May 21	May 20	July 3	May 2	May 26	Apr. 22	Apr. 25	May 1	May 2	Apr. 25					
1897	May 29	May 29	July 24	May 11	May 28	Apr. 24	Apr. 25	May 5	Apr. 27	Apr. 13					
1898	June 3	May 29	July 24	May 11	May 28	Apr. 24	Apr. 25	May 5	Apr. 27	Apr. 27					
1899	May 29	May 25	July 19	May 16	June 9	Apr. 18	May 1	May 2	Apr. 26	Apr. 26					
1900	May 30	May 27	July 6	May 7	June 10	Apr. 26	Apr. 29	May 3	May 2	Apr. 29					
1901	June 6	May 29		May 16	June 3	Apr. 27									
1902															
1903															
1904															
1905															
1906	June 2	May 27		May 13		May 1	May 2								
1907	May 25	May 23		May 11		Apr. 26									
1908	June 13	June 12		May 30		May 1	May 25								
1909	June 1	May 25		May 15		Apr. 22	May 15								
1910	June 11	June 5		June 23		May 6	May 14								
1911	May 23	May 21		May 8		June 15	Apr. 9								
1912	May 25	May 25		May 10		June 10	Apr. 30	May 12							
Average.	June 3	May 28	July 20	May 14	June 8	Apr. 25	May 5	May 2	May 5	May 3			May 10		
Earliest.	May 21	May 20	July 3	May 2	May 26	Apr. 8	Apr. 25	Apr. 25	Apr. 26	Apr. 17			May 1		
Latest.	June 15	June 12	July 29	May 30	June 23	May 8	May 25	May 10	May 18	May 15			May 18		

## SUPPLEMENT NO. 2.

TABLE 4.—*Dates of blossoming at Wauseon, Ohio, for 114 different plants, 1883 to 1912—Continued.*

{The numbers following the common names refer to the numbers of the list on pp. 26 to 28.}

Year.	Dog violet (127).	Long-spurred violet (127b).	Pansy (127c).	Periwinkle (143).	Butterfly weed (1443).	Swamp milkweed (144b).	Common milkweed (1453).	Wild morning-glory (1467).	Garden phlox (1481).	Wild sweet-william (1482).	Wild phlox (1486).	Hairy phlox (1485).	Moss pink (1487).	Corn gromwell (1507).	Red puccoon (1511).	
1883.....				Apr. 18					June 30							
1884.....	May 9			Apr. 6					June 25							
1885.....				Apr. 26					June 14							
1886.....				Apr. 24					June 14							
1887.....				May 4												
1888.....				Apr. 20												
1889.....				May 3												
1890.....				Apr. 25												
				Apr. 27												
				Apr. 27												
				Apr. 17												
1891.....																May 6
1892.....																May 12
1893.....																May 11
1894.....																May 23
1895.....																May 3
1896.....																
1897.....																
1898.....																
1899.....																
1900.....																
1901.....																May 28
1902.....																
1903.....																
1904.....																
1905.....	May 2															May 16
1906.....		May 2														May 23
1907.....		May 4														May 30
1908.....		May 10														
1909.....		May 1														
1910.....		Apr. 14														
1911.....																
1912.....																
Average.....	May 2	May 1	Apr. 17	Apr. 24	July 1	July 7	June 30	July 1	June 15	June 2	May 2	May 3	May 4	May 5	May 18	
Earliest.....	Apr. 24	Apr. 16	Mar. 17		June 10	June 24	June 11	July 29	July 15	May 10	Apr. 20	Apr. 21	Apr. 9	Apr. 19	May 4	
Latest.....	May 12	May 16	May 8		July 19	July 29	July 28	July 28	July 14	July 7	May 14	May 11	May 10	May 19	June 4	

Year.	Blue vervain (1519).	Skullcap (1522).	Campion (1541).	Self-heal (1543).	Motherwort (1547).	Bittersweet (1605).	Jimson weed (James-town weed) (1609).	Mullein (1610).	Culver's root (1640).	Common plantain (1655).	Teasel (1739).	Dandelion (1762).	Prickly lettuce (1766).	Wild lettuce (1767).	White vervain (1518).	
1883.....																
1884.....																
1885.....																
1886.....																
1887.....																
1888.....																
1889.....																
1890.....																
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1905.....																
1906.....																
1907.....																
1908.....																
1909.....																
1910.....																
1911.....																
1912.....																
Average.....	July 16	July 16	July 2	July 12	June 27		July 4	July 7	July 15	July 2	July 21	April 24	July 12	July 13	July 11	July 11
Earliest.....	June 24	July 2	June 22	June 29			June 7	June 22	June 20	June 20	July 15	April 24	July 18	July 20	July 12	July 17
Latest.....	Aug. 5	July 30	July 12	July 25			July 13	July 27	July 18	July 24	July 18	April 29	July 24	July 26	July 20	July 23

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

TABLE 4.—*Dates of blossoming at Wauseon, Ohio, for 114 different plants, 1883 to 1912—Concluded.*

The numbers following the common names refer to the numbers on the list on pp. 26 to 28.]

## SUPPLEMENT NO. 2.

TABLE 5.—*Dates on which harvesting began, for wheat and oats, at Wauseon, Ohio, 1870 to 1912, inclusive.*

Year.	Wheat harvest began.	Oats harvest began.	Year.	Wheat harvest began.	Oats harvest began.	Year.	Wheat harvest began.	Oats harvest began.	Year.	Wheat harvest began.	Oats harvest began.	Year.	Wheat harvest began.	Oats harvest began.
1870.....			1881.....	July 7	Aug. 1	1891.....	July 2	July 27	1901.....	July 6	July 18	1911.....	June 25	July 17
1871.....			1882.....	July 11	Aug. 4	1892.....	July 5	Aug. 4	1902.....	July 9	July 26	1912.....	July 12	July 22
1872.....	July 10	July 29	1883.....	July 13	Aug. 14	1893.....	July 2	July 21	1903.....	July 6	...do...	Average.....	July 6	July 26
1873.....	July 8	July 2	1884.....	July 10	July 25	1894.....	July 1	July 18	1904.....	July 8	July 28			
1874.....	July 3	July 23	1885.....	July 14	Aug. 4	1895.....	June 26	July 18	1905.....	July 4	July 20			
1875.....	July 19	July 29	1886.....	July 1	July 22	1896.....	June 23	July 13	1906.....	July 2	July 23			
1876.....	July 11	July 31	1887.....	June 28	July 16	1897.....	July 8	July 24	1907.....	July 16	Aug. 2			
1877.....	July 9	...do...	1888.....	July 10	July 31	1898.....	July 1	July 20	1908.....	June 27	July 28			
1878.....	July 9	July 27	1889.....	July 13	Aug. 3	1899.....	July 4	July 18	1909.....	July 7	...do...			
1879.....	July 7	July 31	1890.....	July 5	July 15	1900.....	June 29	July 21	1910.....	July 11	July 19			
1880.....	July 2	July 26												

TABLE 6.—*Daily mean temperatures (°F.), Wauseon, Ohio, 1883–1912.*

$$[m = \frac{1}{4}(7a + 2p + 9P + 9p)]$$

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1883																									
1.....	20	4	47	28	51	56	72	71	68	47	37	44	1.....	12	13	30	41	46	66	67	69	52	67	36	36
2.....	12	14	37	30	60	68	78	67	69	47	36	23	2.....	9	14	26	44	46	67	65	53	66	53	38	31
3.....	18	32	25	36	56	68	80	59	55	45	46	25	3.....	18	34	36	28	44	69	68	64	59	51	34	37
4.....	15	17	21	47	54	65	76	60	62	46	48	38	4.....	28	32	33	35	47	69	73	67	54	41	47	18
5.....	18	7	23	50	47	72	78	60	53	50	50	39	5.....	34	7	28	47	58	64	75	63	53	41	51	
6.....	25	12	31	35	57	68	75	62	57	53	42	42	6.....	39	7	26	45	55	68	74	64	58	42	59	11
7.....	24	16	15	33	67	68	68	61	62	49	39	52	7.....	32	24	23	54	42	67	61	53	43	53	26	
8.....	11	17	20	43	57	69	60	62	44	60	49	33	8.....	40	22	12	32	45	55	79	70	66	40	40	30
9.....	3	14	37	53	60	66	61	67	48	72	64	35	9.....	33	14	34	28	41	59	75	78	57	42	38	19
10.....	9	11	28	58	58	63	71	67	48	63	46	34	10.....	27	-13	21	39	38	62	67	70	54	49	36	
11.....	6	26	22	48	47	63	74	67	53	54	38	37	11.....	41	-6	21	37	51	67	68	69	59	54	53	14
12.....	16	16	33	46	47	68	72	70	57	58	29	35	12.....	22	1	22	34	51	72	73	75	55	62	30	
13.....	22	26	35	47	48	60	72	64	53	39	45	13.....	12	-8	24	28	58	74	73	68	52	38	21		
14.....	5	34	48	70	54	61	74	60	70	43	18	25	14.....	19	8	37	33	61	76	69	58	69	49	28	
15.....	11	38	24	54	51	67	70	63	71	40	17	16	15.....	24	30	21	39	64	72	72	60	51	31		
16.....	22	51	27	46	53	76	77	66	67	37	20	16	16.....	18	-8	9	39	67	60	77	62	54	50	34	
17.....	32	19	42	54	52	74	68	72	56	47	37	13	17.....	2	2	11	38	69	63	74	66	62	59	33	
18.....	23	20	34	62	65	74	62	72	57	56	43	20	18.....	-6	3	17	42	65	63	70	73	66	50	49	
19.....	29	29	13	46	68	65	66	79	61	56	43	15	19.....	-7	-1	10	56	54	69	80	66	62	56	36	
20.....	23	31	10	47	55	65	66	71	64	37	54	17	20.....	-1	-2	4	64	61	67	82	66	61	41	36	
21.....	-2	27	13	49	44	66	73	71	60	38	60	16	21.....	-3	-2	8	66	66	69	83	75	67	35	45	
22.....	-10	28	21	38	38	71	81	76	63	36	44	11	22.....	-8	5	10	67	64	54	77	67	57	42	30	
23.....	-5	21	22	36	53	74	74	62	61	40	46	23	23.....	16	12	19	71	65	60	76	71	46	38	33	
24.....	16	35	24	34	63	70	65	62	51	42	42	28	24.....	28	22	29	53	65	67	78	68	54	40	29	
25.....	9	26	31	42	70	64	68	64	50	47	52	24	25.....	19	25	28	44	64	71	78	60	66	45		
26.....	21	18	33	50	54	58	70	62	48	43	39	32	26.....	-4	30	42	52	66	74	67	56	52	27	30	
27.....	32	25	31	54	56	63	71	63	58	42	28	24	27.....	0	29	37	56	61	71	73	53	55	29	34	
28.....	25	34	28	39	54	62	65	62	48	56	31	17	28.....	-9	39	34	47	60	70	80	59	69	49	37	
29.....	32	37	32	58	66	60	62	62	55	54	38	34	29.....	6	31	52	63	59	81	64	68	68	41	34	
30.....	35	33	33	47	53	65	62	62	44	50	33	37	30.....	22	36	48	63	58	78	63	67	29	36	34	
31.....	13	30	30	52	52	65	65	65	42	42	31	31	31.....	23	40	66	66	79	59	59	32	32			
1884																									
1.....	21	20	13	39	64	65	73	71	64	63	45	19	1.....	36	13	15	31	49	70	69	70	55	41	52	13
2.....	14	32	14	33	46	72	74	76	71	70	38	23	2.....	36	2	18	28	56	68	68	62	63	43	56	16
3.....	-2	27	12	38	56	70	71	72	74	71	40	36	3.....	50	-5	27	30	59	57	72	63	69	49	40	11
4.....	-10	26	9	45	59	70	72	61	78	73	39	40	4.....	35	8	28	32	57	62	79	62	72	52	43	16
5.....	-9	36	17	40	65	71	69	58	80	77	34	48	5.....	23	8	28	32	57	62	79	62	72	52	43	
6.....	-9	31	26	39	57	68	64	67	77	64	32	50	6.....	13	23	32	29	61	70	82	65	74	55	30	22
7.....	3	27	23	42	56	68	66	62	76	65	42	37	7.....	12	25	33	33	51	67	81	72	58	67	27	
8.....	13	32	21	34	53	74	68	58	78	50	37	33	8.....	12	38	28	36	60	63	70	72	60	53	32	
9.....	12	30	22	36	56	64	67	58	81	45	47	26	9.....	13	42	28	45	54	66	72	73	60	34	28	
10.....	28	24	23	37	55	64	71	62	81	51	51	32	10.....	-6	44	29	45	61	65	76	74	66	53	38	
11.....	16	27	48	40	54	63	74	64	68	64	41	29	11.....	-1	45	35	41	63	65	73	77	64	61	34	
12.....	14	34	32	46	59	68	73	72	62	62	38	27	12.....	2	42	35	53	65	74	71	56	63	49	35	
13.....	36	32	38	46	51	61	65	72	58	56	40	25	13.....	9	35	29	54	66	72	75	76	60	57	36	
14.....	24	10	29	59	56	60	69	74	60	43	40	31	14.....	19	33	31	61	68	76	66	61	58	57	33	
15.....	11	17	32	51	57	63	66	74	73	50	42</														

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 6.—*Daily mean temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

[ $m = \frac{1}{4}(7a + 2p + 9r + 9v)$ .]

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1887																										
1.	6	11	41	34	61	62	78	78	74	56	41	23	1.	31	19	32	37	46	48	76	72	72	55	47	33	
2.	2	24	44	42	70	58	80	77	68	61	49	32	2.	33	30	33	43	40	50	78	68	69	49	50	44	
3.	—	22	28	62	59	66	80	79	62	59	54	43	3.	24	24	35	40	47	56	68	70	74	55	42	28	
4.	—	15	16	25	30	59	74	74	79	56	47	41	42	4.	34	35	31	35	57	52	66	68	73	46	36	28
5.	—	11	20	29	28	54	71	74	78	65	46	38	28	5.	34	12	35	31	64	56	71	63	63	49	29	38
6.	—	6	36	40	36	60	71	78	69	78	59	51	34	6.	33	10	37	35	70	64	70	65	62	40	36	35
7.	—	4	42	40	38	62	74	80	68	63	69	54	33	7.	32	16	33	42	74	64	75	68	63	34	42	42
8.	—	7	44	38	48	64	77	79	72	59	66	37	33	8.	37	26	27	47	73	66	78	69	67	41	43	47
9.	—	12	32	41	62	64	67	74	77	51	65	41	35	9.	32	20	27	48	76	66	79	71	69	50	44	40
10.	—	1	48	35	64	65	64	71	83	56	51	35	40	10.	22	24	28	51	78	55	79	68	70	53	44	47
11.	—	11	24	33	61	66	67	75	77	67	40	35	35	11.	24	22	35	51	67	64	71	61	67	59	43	40
12.	—	26	13	40	54	65	66	78	69	78	46	37	29	12.	25	9	40	45	60	66	75	70	66	57	49	44
13.	—	28	21	28	44	65	69	83	71	78	45	43	32	13.	32	10	42	38	59	71	77	67	69	44	31	36
14.	—	27	32	23	56	58	72	76	64	63	40	44	32	14.	28	18	36	40	62	72	63	66	71	40	37	36
15.	—	24	36	26	54	66	75	83	70	57	43	40	29	15.	32	27	46	44	63	72	65	62	68	44	31	36
16.	—	26	32	29	38	66	78	84	68	67	54	43	26	16.	50	44	45	48	71	74	68	60	56	50	30	30
17.	—	11	34	24	37	57	77	86	65	56	55	34	26	17.	32	30	47	57	78	69	74	61	52	52	34	34
18.	—	—	34	29	32	58	76	76	71	64	44	38	30	18.	24	20	44	61	77	72	73	66	50	43	40	40
19.	—	26	25	32	42	64	78	74	66	65	43	34	36	19.	20	8	40	65	60	73	74	67	55	52	46	46
20.	—	40	25	38	50	74	75	76	69	66	50	22	34	20.	27	5	36	60	55	72	67	74	53	37	46	
21.	—	28	26	35	54	72	64	75	68	73	35	18	14	21.	15	32	38	51	44	64	73	66	45	37	37	39
22.	—	51	32	26	55	73	62	74	70	54	41	33	10	22.	26	14	39	45	46	60	74	66	49	41	38	34
23.	—	45	31	32	39	67	55	65	64	44	46	37	21.	23.	—	2	43	58	52	58	60	69	59	33	37	36
24.	—	32	25	41	42	63	60	70	58	47	38	39	14	24.	33	9	51	59	57	61	65	69	42	45	57	57
25.	—	36	26	30	41	59	67	72	60	53	28	38	17	25.	34	15	36	44	50	67	65	71	54	48	30	46
26.	—	8	29	28	41	56	63	76	57	55	31	52	17	26.	34	31	47	48	58	70	72	72	47	44	30	35
27.	—	27	15	26	48	60	65	81	57	52	36	32	31.	27.	26	31	42	53	52	69	78	72	49	39	35	33
28.	—	37	21	20	52	64	70	80	58	60	49	15	5.	28.	22	29	35	47	50	71	73	70	58	40	23	37
29.	—	34	—	17	50	68	77	79	60	63	32	16	10.	29.	20	30	43	41	71	64	69	59	38	23	43	
30.	—	14	—	26	54	60	77	82	66	65	58	30	22.	30.	26	32	43	40	72	67	75	75	56	43	17	
31.	—	6	—	31	—	61	—	78	67	—	40	—	33.	31.	—	—	—	—	—	69	72	—	46	—	30	—
1888																										
1.	20	28	34	44	35	56	68	69	58	58	66	33	1.	50	30	19	33	45	70	74	76	63	57	44	26	
2.	16	27	38	37	44	53	70	73	64	59	59	31	2.	38	27	20	43	54	71	72	83	67	59	39	19	
3.	19	28	23	86	55	56	76	84	67	59	43	34	3.	29	43	26	53	63	78	73	86	73	58	32	23	
4.	—	32	32	16	45	56	61	78	78	68	54	51	37	4.	30	58	20	43	53	79	74	66	71	61	34	19
5.	—	29	26	18	59	53	72	77	75	58	55	61	32	5.	56	34	12	42	45	75	66	69	70	64	50	21
6.	—	37	22	22	45	66	66	76	75	61	46	45	29	6.	35	25	14	55	38	66	73	72	74	58	56	27
7.	—	34	26	27	43	50	57	75	73	64	54	40	37	7.	30	28	15	50	46	60	80	70	74	53	54	19
8.	—	27	5	29	38	59	67	74	72	68	45	51	36	8.	30	20	22	62	52	64	75	78	62	57	39	17
9.	—	21	—	2	37	50	60	72	63	64	65	38	22	9.	35	22	31	44	56	66	68	73	59	58	38	27
10.	—	12	12	41	46	65	66	72	69	67	44	40	35	10.	40	25	36	33	43	69	65	63	60	60	37	35
11.	—	4	15	25	47	70	59	78	69	75	46	38	31	11.	51	36	51	51	47	70	70	64	63	53	38	33
12.	—	22	21	18	36	47	66	56	58	61	41	40	25	12.	54	28	42	65	59	67	76	72	64	57	39	20
13.	—	16	37	19	45	41	71	61	62	52	46	44	18	13.	22	36	38	65	57	70	78	72	49	63	43	28
14.	—	20	25	25	46	40	73	64	72	57	50	52	23	14.	27	38	29	44	54	70	80	72	54	48	44	33
15.	—	6	3	39	39	47	78	64	74	67	48	48	36	15.	34	33	18	39	53	72	78	70	56	52	46	30
16.	—	7	27	35	43	47	79	68	78	59	48	30	45	16.	17.	40	26	43	54	76	73	73	54	49	45	32
17.	—	17	34	27	50	52	82	73	73	58	42	29	29	17.	19.	50	33	46	48	71	77	66	56	48	48	31
18.	—	8	37	34	44	49	80	74	68	58	43	33	19.	18.	27	35	37	42	58	72	69	63	57	48	28	
19.	—	13	42	55	40	47	78	70	72	58	47	36	22.	19.	42	31	34	36	53	71	65	64	58	47	41	26
20.	—	10	29	41	37	54	81	69	69	60	39	27	27.	26	22	46	45	48	68	65	63	55	45	35	28	
21.	—	0	28	24	43	58	78	76	69	61	36	30	19.	21.	18	48	54	53	72	65	63	53	42	46	39	
22.	—	8	33	5	41	62	77	71	58	56	39	29	22.	13.	28	37	64	70	79	69	57	43	36	39	39	
23.	—	16	38	16	41	64	76	72	64	58	41	30</														

## SUPPLEMENT NO. 2.

TABLE 6.—*Daily mean temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

$$\{m = \frac{1}{4} (7a + 2b + 9c + 9d)\}$$

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1891														1893												
1892														1894												
1.....	48	34	12	43	55	74	64	72	63	60	37	35	1.....	31	26	29	45	56	66	68	68	68	52	55	9	
2.....	22	39	20	41	54	67	69	66	69	73	28	41	2.....	20	18	34	46	45	68	71	72	60	58	51	21	
3.....	13	11	24	35	49	72	63	63	61	74	26	52	3.....	7	14	25	55	46	72	67	69	62	57	38	16	
4.....	20	8	18	31	44	52	64	69	59	61	37	38	4.....	2	6	18	50	45	74	68	74	73	52	38	24	
5.....	27	32	19	33	42	57	67	74	59	48	38	39	5.....	15	30	22	56	46	71	71	79	75	58	40	13	
6.....	18	36	22	31	48	53	69	74	62	52	39	29	6.....	12	35	35	36	51	60	64	66	70	56	47	14	
7.....	13	34	27	36	52	58	59	70	57	44	51	23	7.....	11	5	38	68	50	68	82	68	77	59	49	21	
8.....	19	32	34	38	61	63	57	81	55	46	56	34	8.....	15	8	44	54	53	69	74	70	63	66	50	35	
9.....	28	31	26	38	68	73	65	88	57	47	57	38	9.....	14	32	42	47	56	72	73	72	66	65	46	21	
10.....	31	24	37	55	65	75	69	86	64	50	52	39	10.....	0	29	44	42	64	71	69	73	70	63	45	13	
11.....	31	29	46	40	53	70	72	80	69	48	42	33	11.....	0	27	44	47	71	65	73	70	70	65	43	25	
12.....	28	35	32	46	53	65	76	70	73	43	37	35	12.....	8	24	36	63	58	67	80	65	70	61	50	14	
13.....	22	33	22	59	57	67	79	71	63	51	30	33	13.....	-1	28	50	51	51	67	81	64	70	58	41	30	
14.....	22	28	11	58	58	75	73	67	62	50	33	48	14.....	-4	39	26	34	59	72	80	66	76	45	34	20	
15.....	23	42	27	47	66	78	60	68	71	42	41	48	15.....	-6	30	17	36	55	71	76	72	70	41	23	28	
16.....	22	49	28	47	45	80	70	76	73	44	42	30	16.....	1	25	22	43	48	71	72	68	57	39	32	24	
17.....	26	39	34	61	50	71	74	72	78	53	17	20	17.....	-1	16	27	48	51	75	74	69	60	43	48	29	
18.....	26	22	29	64	58	66	67	76	80	50	18	21	18.....	14	22	27	44	56	76	72	71	70	47	30	21	
19.....	27	28	29	62	68	69	67	79	75	40	33	26	19.....	4	14	29	41	63	80	72	65	70	52	27	20	
20.....	36	45	33	53	69	71	68	77	74	41	38	31	20.....	12	4	40	43	72	79	68	68	63	50	30	24	
21.....	36	33	35	64	69	75	73	71	73	43	51	44	21.....	20	15	41	37	67	75	74	65	76	47	35	45	
22.....	32	27	36	66	49	71	80	67	71	38	50	45	22.....	25	20	32	35	75	66	68	68	60	52	31	50	
23.....	32	44	40	56	51	72	71	60	76	40	39	36	23.....	28	27	54	38	48	68	70	74	56	58	22	45	
24.....	27	52	36	47	60	75	72	65	74	43	28	33	24.....	26	28	42	45	61	75	78	75	53	46	18	45	
25.....	32	29	34	51	64	78	66	59	70	54	28	25.....	20	18	31	41	59	73	79	72	44	40	16	24		
26.....	28	19	33	58	51	74	64	67	71	49	35	21	26.....	19	26	29	53	49	72	71	75	46	49	31	36	
27.....	35	21	34	52	52	63	67	61	75	36	26	25	27.....	18	37	33	46	52	71	69	77	49	37	31	41	
28.....	32	11	34	52	57	72	69	53	74	37	20	38	28.....	40	30	30	52	60	69	75	71	45	37	31	41	
29.....	36.....	44	44	56	54	73	66	63	55	55	9	33	29.....	22	40	42	62	67	75	75	61	53	32	36	22	
30.....	34.....	43	43	63	61	66	68	59	55	59	20	32	30.....	24	47	42	64	73	78	57	48	35	30	23	22	
31.....	39.....	42	42	60	69	62	60	54	54	38	38	31.....	29	58	62	62	62	76	64	64	46	46	46	24		
1892														1894												
1.....	50	39	25	63	61	70	61	70	55	55	52	27	1.....	33	20	41	38	66	55	75	74	68	51	49	36	
2.....	22	35	25	61	63	70	65	70	63	52	51	31	2.....	41	27	37	35	56	63	72	72	66	65	49	22	
3.....	18	33	35	55	67	57	62	76	71	67	44	37	3.....	46	28	43	47	65	71	72	57	78	58	41	30	
4.....	22	31	34	66	58	66	62	67	73	54	35	26	4.....	37	13	56	45	60	63	69	77	47	42	36	36	
5.....	12	25	32	56	50	67	65	67	61	38	29	29	5.....	33	24	61	36	60	52	69	66	70	48	39	36	
6.....	20	27	32	45	58	70	67	70	58	50	44	42	6.....	31	38	36	41	61	55	68	75	70	48	36	41	
7.....	10	41	37	54	47	67	67	75	55	53	43	48	7.....	18	38	34	39	59	61	65	78	33	48	48	48	
8.....	12	31	34	39	46	66	72	81	61	44	25	29	8.....	22	38	36	41	55	69	67	82	74	42	33	34	
9.....	1.....	2	22	38	53	68	73	82	70	47	29	31	9.....	28	45	41	36	61	73	69	77	44	31	39	39	
10.....	7	30	14	32	56	67	75	75	69	52	33	25.....	30	31	54	37	64	75	73	67	60	47	28	40		
11.....	25	21	25	34	47	74	77	72	70	56	34	21	11.....	28	26	40	36	57	81	80	69	56	46	21	37	
12.....	22	12	38	37	49	79	78	69	67	56	31	27	12.....	16	18	44	46	63	79	81	73	62	45	26	33	
13.....	18	23	24	41	53	79	75	69	57	55	47	37	13.....	36	18	41	51	66	75	78	76	44	33	40	38	
14.....	18	31	18	33	55	72	74	71	54	59	39	34	14.....	42	16	34	53	63	75	71	74	76	37	48	41	
15.....	4	15	22	38	60	76	71	74	58	64	41	29	15.....	42	15	43	51	55	79	74	71	72	47	35	41	
16.....	12	14	23	45	61	80	63	75	56	59	45	32	16.....	40	16	46	60	69	78	77	64	61	60	40	32	
17.....	23	28	20	42	64	75	68	76	58	55	47	31	17.....	44	25	60	60	72	75	81	67	64	27	30	30	
18.....	17	34	22	40	62	75	73	80	65	61	32	31	18.....	40	27	65	60	47	65	82	73	61	49	32	34	
19.....	2	33	26	41	48	71	75	66	58	49	27	27	19.....	30	22	52	60	38	67	87	68	56	64	19	45	
20.....	4	32	23	44	50	74	73	67	56	50	31	20.....	47	17	42	49	44	75	71	69	61	62	38	28		
21.....	15	34	28	51	52	75	75	68	66	49	29	17	21.....	37	10	58	42	48	78	65	61	66	66	31	31	
22.....	29	35	39	43	45	75	79	72	68	50	27	17	22.....	28	14	49	4									

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 6.—*Daily mean temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

[ $m = \frac{1}{4}(7a + 2p + 8v + 9w)$ .]

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1895																									
1.	17	12	31	34	61	82	67	67	59	48	30	34	1.	49	21	34	42	38	54	76	71	67	69	49	28
2.	25	4	26	34	68	81	68	70	67	51	37	15	2.	52	30	27	43	41	67	79	76	65	55	40	24
3.	27	15	28	36	73	84	65	73	76	56	47	9	3.	56	29	25	45	46	65	82	82	64	57	45	31
4.	13	3	6	44	76	75	71	74	66	52	51	19	4.	29	26	31	53	55	55	86	72	66	57	51	32
5.	23	— 4	16	58	76	63	74	78	72	51	56	14	5.	15	32	41	45	61	62	82	67	70	68	48	26
6.	40	— 2	25	55	67	57	76	68	72	55	58	20	6.	15	35	24	41	64	64	74	65	68	61	40	31
7.	33	— 1	32	54	64	63	79	71	66	53	62	33	7.	20	32	27	39	56	50	78	71	72	48	42	30
8.	20	0	27	47	68	71	76	65	41	44	23	8.	27	30	43	41	59	56	83	70	78	60	43	36	
9.	19	8	35	45	71	72	63	72	75	35	35	17	9.	33	27	53	32	66	60	85	68	77	46	38	50
10.	29	5	27	38	77	78	64	83	78	50	28	24	10.	31	27	38	39	62	63	82	70	76	52	44	52
11.	24	5	22	41	51	77	69	75	80	51	28	29	11.	26	25	44	33	63	69	68	68	72	64	35	40
12.	— 5	6	32	50	43	72	78	72	78	46	30	14	12.	18	26	29	41	60	66	65	76	52	34	36	
13.	8	18	29	41	43	65	68	72	62	51	37	10	13.	24	29	29	51	57	73	59	69	80	54	34	38
14.	8	24	9	42	39	75	75	78	68	46	48	24	14.	25	32	29	42	49	75	68	71	75	74	41	40
15.	26	18	14	46	42	68	74	81	68	43	39	24	15.	28	29	31	50	52	81	70	70	83	78	60	37
16.	23	19	22	42	48	73	80	77	71	47	40	33	16.	34	36	27	38	56	68	70	64	71	64	33	30
17.	26	31	47	52	76	75	79	76	43	40	44	17.	40	37	37	40	59	73	71	55	54	43	29	16	
18.	33	28	36	47	57	77	76	75	80	55	39	48	18.	20	28	52	55	64	65	74	63	61	51	32	13
19.	26	25	32	54	50	69	79	70	83	36	31	55	19.	16	30	49	33	69	70	76	59	54	64	44	16
20.	34	29	30	58	41	65	82	66	81	32	24	53	20.	30	38	47	35	64	60	77	58	47	55	52	26
21.	32	27	30	62	46	72	79	66	81	40	23	38	21.	27	32	47	52	49	57	74	64	50	44	23	
22.	18	23	31	55	55	72	75	73	85	45	32	39	22.	20	24	46	63	62	68	75	68	58	43	30	
23.	12	19	48	51	61	76	67	81	53	34	32	41	23.	11	23	34	62	56	74	72	61	55	50	22	
24.	11	35	54	65	66	74	69	72	56	42	31	46	24.	— 4	27	31	67	51	75	73	66	58	46	30	
25.	20	37	41	69	65	82	72	74	64	41	34	47	25.	— 12	19	29	54	50	69	80	61	66	48	44	26
26.	16	33	31	54	54	73	73	67	68	57	26	25	26.	— 7	14	81	49	52	63	74	69	69	52	45	25
27.	2.	40	51	52	60	72	66	74	49	48	27	24	27.	1	11	32	48	60	64	69	67	52	57	28	
28.	2.	52	39	55	71	70	68	73	55	31	34	31	28.	6	21	37	63	53	70	72	72	55	55	32	
29.	14.	41	64	77	67	77	65	75	67	44	35	30	29.	14.	45	58	56	78	71	75	60	42	22	34	
30.	2.	34	66	82	66	64	72	72	42	30	30	22	30.	11	46	48	49	78	71	61	64	44	23	34	
31.	7.	35	—	83	—	63	63	—	37	—	15	—	31.	11	—	42	—	49	—	75	64	—	49	—	
1896																									
1.	20	39	25	41	62	58	74	73	59	51	49	14	1.	12	1	27	39	67	67	81	73	81	68	46	30
2.	29	32	26	23	66	59	76	69	71	47	54	14	2.	17	7	28	33	63	68	83	76	82	73	44	34
3.	4.	32	28	30	66	64	79	74	63	47	58	25	3.	26	7	25	33	58	67	70	69	84	77	44	32
5.	— 3	31	26	32	69	72	77	78	57	50	58	30	4.	26	30	26	27	45	69	66	66	78	68	58	33
6.	5.	34	28	45	63	70	68	82	59	52	40	43	5.	31	26	27	28	40	71	66	70	74	61	50	25
7.	14.	32	40	27	62	77	69	80	57	48	40	40	6.	33	24	34	31	47	76	72	74	72	51	37	23
8.	18.	30	29	35	66	73	66	78	59	41	35	36	7.	32	36	39	38	55	77	75	73	56	57	44	18
9.	23.	30	28	37	73	66	68	85	63	39	30	36	8.	30	42	47	47	56	73	79	70	60	53	46	13
10.	32.	28	32	42	75	62	61	86	70	27	27	41	9.	30	43	52	46	61	73	71	66	59	53	38	14
11.	32.	29	28	48	76	63	73	78	75	50	41	41	10.	33	49	52	50	55	76	63	71	54	66	33	15
12.	34.	23	17	60	71	66	74	80	76	48	36	40	11.	36	46	52	53	61	76	60	72	60	59	29	19
13.	21.	20	11	66	71	65	77	74	70	50	36	47	12.	47	34	40	54	53	69	67	63	52	31	18	
14.	19.	22	12	68	68	65	79	71	66	48	27	34	13.	33	38	40	54	54	70	70	68	65	47	36	
15.	20.	28.	22	62	67	69	77	74	69	50	36	32	14.	32	32	39	52	60	72	80	70	69	42	37	
16.	17.	29.	26	70	63	64	73	77	60	43	31	27	15.	31	23	46	53	60	60	59	78	70	43	32	
17.	22.	8.	23	74	67	66	61	68	56	34	36	24	16.	24	17	56	60	58	62	80	76	61	54	32	
18.	33.	7.	30	74	68	69	64	63	37	61	27	17.	26	33	44	59	55	67	78	74	70	66	45		
19.	34.	21.	33	75	66	71	71	60	58	32	30	18.	26	33	43	44	63	74	76	70	68	64	40		
20.	27.	3.	29	56	58	75	70	58	47	40	31	21.	32	30	55	44	64	64	78	68	64	40	32		
21.	30.	6.	21	58	59	77	72	65	50	43	31	27.	37	31	43	42	70	68	70	67	58	56	41		
22.	29.	9.	38	52	66	73	76	69	56	34	36	24.	34	23	53	50	72	60	72	74	64	48	54		
23.	28.	29.	30	49	69	71	73	71	41	38	30	22.	33	24	60	55	65	65	73	80	66	42	38		
24.	35.	36.	23.	50	60	64	63	65	46	38	46	13.	30	26	33	47	68	70	77	84	61	44	34		
25.	34.	34.	30.	60	72	68	62	65	56	33	43	11.	29	19	36	51	69	80	84	73	61	53	22		
26.	34.	29.	46	61	74	77	69	67	63	39	56	21.	30	16	43	44	62	73	74	69	62	55	24		
27.	27.																								

## SUPPLEMENT NO. 2.

TABLE 6.—*Daily mean temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.* $[m = \frac{1}{2}(7a+2p+9r+9d).]$ 

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1899																									
1.....	12	6	29	23	72	68	72	75	42	44	41	1.....	6	11	33	40	66	57	84	67	60	66	45	51	
2.....	25	20	36	24	74	64	76	77	49	34	41	2.....	9	19	30	34	69	55	80	75	66	50	43	34	
3.....	38	24	40	33	57	72	80	74	55	34	33	3.....	6	29	38	39	51	59	82	72	69	39	45	21	
4.....	44	18	32	33	59	79	79	76	67	56	38	4.....	27	22	30	43	57	69	79	66	73	40	24	17	
5.....	21	14	26	36	61	81	72	70	77	53	35	21	5.....	18	15	6	44	65	76	77	66	75	45	26	20
6.....	20	12	14	38	57	78	71	68	72	49	36	26	6.....	31	12	14	39	61	64	76	69	73	50	38	21
7.....	13	9	20	36	58	78	72	66	75	51	40	33	7.....	32	9	30	44	62	52	62	75	75	52	40	41
8.....	30	— 4	18	35	56	72	63	67	66	52	37	33	8.....	42	18	39	43	57	55	66	73	62	64	41	32
9.....	20	— 11	35	40	65	69	66	72	59	52	48	38	9.....	31	16	32	44	60	61	74	81	64	62	37	30
10.....	13	— 8	37	44	64	62	68	75	61	66	46	50	10.....	36	12	40	45	59	70	83	70	65	58	39	30
11.....	19	— 4	56	60	62	70	78	80	62	39	56	11.....	31	18	30	45	56	75	76	67	62	68	53	22	
12.....	32	— 7	31	53	67	76	78	74	63	65	33	12.....	25	13	35	46	46	78	69	71	68	58	36	34	
13.....	40	1	28	58	53	78	67	69	55	71	42	13.....	29	13	36	46	52	74	73	74	64	46	38	42	
14.....	37	15	30	53	54	80	71	66	50	66	44	14.....	33	5	32	48	53	75	77	76	67	42	31	2	
15.....	38	30	38	46	52	64	70	66	58	66	47	15.....	40	12	27	50	56	66	80	75	66	51	32	2	
16.....	37	32	32	44	63	60	75	70	74	70	46	16.....	32	22	31	55	60	68	83	71	61	46	32	2	
17.....	30	40	36	58	65	64	69	74	50	54	30	17.....	21	28	40	53	69	70	77	72	53	38	34	9	
18.....	20	35	38	61	51	70	69	77	62	51	54	18.....	21	28	54	35	62	73	79	74	47	47	33	2	
19.....	22	38	27	55	53	80	70	76	53	48	43	19.....	7	14	37	37	55	74	74	76	50	53	34	0	
20.....	31	42	25	61	52	74	75	80	52	42	41	20.....	41	15	33	38	54	71	78	74	52	47	34	0	
21.....	35	36	34	63	54	67	77	73	58	45	47	21.....	38	14	26	37	58	73	86	76	54	53	33	4	
22.....	31	34	38	61	51	79	73	74	56	60	47	22.....	28	6	33	45	59	76	81	73	64	60	39	27	
23.....	39	26	25	54	55	78	74	73	54	68	40	23.....	35	6	51	48	70	72	75	73	69	61	36	33	
24.....	26	24	31	59	62	69	80	76	66	64	37	24.....	28	18	53	54	56	75	79	71	64	44	33	33	
25.....	31	32	35	62	66	70	70	75	52	62	36	25.....	25	24	56	55	48	76	78	72	62	40	32	33	
26.....	21	42	31	69	68	69	79	68	45	64	36	14.....	25	12	42	59	50	79	76	73	68	55	28	33	
27.....	7	25	33	72	67	74	72	50	55	40	11	27.....	28	16	32	57	54	83	83	73	66	46	24	32	
28.....	11	31	25	72	70	65	72	73	53	51	36	10.....	21	13	23	62	48	80	84	75	65	48	38	31	
29.....	0	2	26	77	63	63	70	73	42	43	40	9.....	18	—	33	66	48	75	78	77	67	54	38	29	
30.....	2	2	25	78	68	65	66	73	37	46	46	2.....	20	—	32	68	52	80	78	78	67	61	36	27	
31.....	— 3	—	30	—	72	—	68	77	—	49	—	9.....	15	—	36	—	60	—	72	61	59	—	27		
1900																									
1.....	13	1	23	45	53	69	66	69	78	62	49	34	1.....	24	27	35	32	52	72	61	73	71	51	56	36
2.....	21	12	26	38	62	62	74	70	76	68	47	33	2.....	31	15	29	33	64	76	70	75	61	53	63	40
3.....	17	28	22	39	39	57	76	71	68	70	46	41	3.....	13	3	29	36	62	66	79	74	66	54	47	29
4.....	30	29	25	34	41	62	82	76	70	72	52	36	4.....	15	1	30	37	68	66	81	68	57	54	55	24
5.....	35	24	17	45	43	67	82	82	77	75	41	35	5.....	26	4	30	46	57	60	80	70	57	53	55	24
6.....	34	34	30	57	59	72	80	80	78	74	37	36	6.....	30	20	37	46	63	69	81	61	62	56	48	33
7.....	40	45	21	59	62	71	75	81	70	57	39	35	7.....	38	8	39	28	52	71	80	65	62	52	38	23
8.....	27	46	24	42	63	64	65	79	72	54	33	32	8.....	33	11	39	40	65	58	79	65	71	60	39	16
9.....	39	19	36	32	49	61	62	81	72	47	33	22	9.....	35	14	37	45	46	63	77	69	53	48	34	16
10.....	30	29	34	33	56	73	70	81	79	51	35	22	10.....	30	19	49	49	41	66	64	72	59	53	46	29
11.....	28	36	19	33	64	68	70	80	52	28	18	11.....	24	18	54	50	47	70	67	61	56	55	55	29	
12.....	29	39	25	31	70	60	64	73	65	54	34	20.....	19	21	55	40	60	75	67	62	48	60	53	36	
13.....	32	23	34	34	74	71	68	75	63	57	33	22.....	19	12	39	38	54	73	75	62	43	51	53	17	
14.....	34	22	22	43	77	70	77	74	66	55	24	14.....	28	16	38	36	50	74	75	64	48	39	41	35	
15.....	35	15	18	53	76	62	79	70	73	59	22	15.....	30	47	42	52	52	76	70	64	47	44	44	35	
16.....	32	10	7	54	68	64	76	75	53	46	26	16.....	20	19	36	42	56	64	72	59	53	46	44	26	
17.....	32	11	12	57	68	68	73	77	52	43	42	33.....	30	23	14	46	63	63	81	61	46	45	37	27	
18.....	47	16	37	56	55	65	71	79	53	54	35	18.....	31	18	18	53	70	67	68	71	60	59	47	34	
19.....	42	16	35	54	51	64	73	78	63	48	58	36.....	20	12	27	52	72	66	74	72	57	54	40	38	
20.....	38	31	24	56	60	70	72	76	68	53	61	27.....	28	18	37	52	70	60	70	71	64	47	48	39	
21.....	32	34	26	55	60	70	66	74	59	63	40	35.....	28	27	40	69	68	53	62	64	45	52	33	23	
22.....	39	30	42	55	63	67	72	60	68	50	45	22.....	26	30	46	55	62	67	65	60	59	46	27	21	
23.....	34	34	39	55	68	68	70	73	59	60	37	35.....	29	37	47	38	67	56	67	58	67	60	44	20	
24.....	45	6	30	55	69	73	72	67	60	36	30	24.....	26	36	40	48	69	60	70	62	57	66	42	12	
25.....	22	9	31	52	66	77	70	78	79	60	35	20.....	28	35	39	54	65	61	75	62	65	54	34	12</td	

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 6.—*Daily mean temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

[ $m = \frac{1}{2} (7a + 2p + 9p + 9b)$ .]

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1903														1905												
1	17	39	24	49	40	57	77	64	62	68	51	18	1	45	10	27	41	44	64	73	64	65	69	69	26	
2	31	38	33	65	52	62	77	69	68	60	48	10	2	27	— 1	29	41	60	61	74	64	66	56	31	32	
3	34	32	33	31	40	62	80	72	68	71	54	27	3	10	2	34	54	68	60	74	70	58	62	40	17	
4	26	27	38	27	49	68	80	68	69	64	56	28	4	18	7	26	42	68	69	73	72	58	64	37	24	
5	25	24	68	36	56	64	71	73	59	57	38	22	5	25	14	31	37	63	76	75	71	57	62	45	27	
6	20	26	38	53	61	66	72	69	58	65	27	26	6	21	7	26	34	60	68	72	72	59	52	41	32	
7	29	26	54	52	51	64	74	58	64	58	29	29	7	23	4	33	31	51	56	69	70	55	55	36	36	
8	12	25	33	50	55	71	73	67	72	51	41	28	8	10	24	29	39	54	58	67	70	64	60	34	34	
9	11	28	37	52	64	63	83	66	76	47	52	26	9	16	26	35	54	46	64	67	75	64	63	29	34	
10	10	39	40	46	65	63	79	70	60	47	42	24	10	9	4	27	52	48	66	79	62	55	32	32		
11	12	36	42	49	66	51	76	62	66	50	44	19	11	26	13	25	39	57	69	70	78	66	42	42	34	
12	— 2	35	42	49	68	52	70	59	75	49	42	28	12	27	20	27	44	58	64	73	77	68	39	45	35	
13	9	31	43	46	66	57	64	63	74	48	34	5	13	18	— 8	27	48	64	66	72	74	59	57	33	29	
14	22	26	48	44	64	59	62	61	76	55	36	7	14	9	6	18	35	69	70	74	68	57	58	22	22	
15	31	22	42	43	58	62	60	66	74	55	42	9	15	10	— 1	28	32	63	75	70	66	57	40	25	25	
16	34	6	45	44	65	64	65	64	63	54	52	13	16	18	14	44	33	56	72	76	64	70	47	36	24	
17	27	— 3	57	46	71	60	67	60	49	44	27	14	17	25	18	52	58	52	79	78	65	67	63	42	31	
18	12	2	62	50	72	64	63	69	46	44	18	18	18	34	15	58	33	50	78	78	72	73	61	33	34	
19	15	8	65	48	74	68	68	66	53	53	22	33	19	32	24	35	50	53	78	75	68	67	60	43	33	
20	28	18	53	48	70	61	67	65	56	52	19	31	20	30	33	31	52	53	74	73	69	68	40	36	36	
21	29	18	34	44	71	63	68	72	60	49	32	34	21	29	33	32	41	57	70	63	75	64	36	42	36	
22	29	22	40	37	66	59	64	76	63	52	36	22	22	13	32	41	42	52	67	69	73	66	41	50	32	
23	17	32	39	44	67	61	70	75	60	85	36	34	23	18	30	56	47	55	61	67	75	65	46	55	24	
24	19	24	33	43	67	59	75	79	46	38	28	34	24	16	32	45	52	60	67	60	68	62	42	62	21	
25	23	25	35	46	68	59	75	79	56	46	23	16	25	9	31	55	53	66	76	58	63	52	34	26	26	
26	39	34	50	47	74	65	70	69	70	34	14	6	26	12	24	47	52	55	61	63	65	53	42	36	38	
27	39	43	46	54	70	64	70	63	49	39	20	17	27	23	30	59	56	60	70	67	63	60	35	37	38	
28	41	32	35	62	67	65	77	66	50	46	20	18	28	3	32	66	65	61	68	70	67	62	32	59	59	
29	45	34	67	59	77	76	68	66	55	45	25	15	29	11	58	55	67	66	71	73	69	61	37	29	32	
30	21	38	47	52	78	65	62	64	46	26	11	30	32	15	50	45	58	72	67	74	66	37	18	29	29	
31	33	51	—	56	—	58	62	—	50	—	15	31	22	52	—	58	—	69	66	—	38	—	27	—	27	
1904														1906												
1	19	5	31	48	52	56	58	71	72	60	46	30	1	24	18	35	37	55	64	72	71	65	48	80	29	
2	7	12	46	34	55	60	63	71	49	43	21	2	32	10	36	40	58	60	72	71	69	56	37	30		
3	0	6	19	30	58	72	67	67	64	44	47	20	3	37	24	38	50	54	68	73	61	64	36	25		
4	— 4	4	26	35	60	75	73	71	63	53	48	19	4	29	23	27	45	60	72	67	77	61	63	40	30	
5	10	32	37	43	64	73	70	70	63	50	43	25	5	29	4	27	37	52	68	72	77	62	60	42	34	
6	21	44	39	40	67	67	68	65	64	40	34	27	6	26	6	28	41	45	76	66	77	64	44	42	32	
7	25	27	35	47	67	60	67	64	68	44	41	31	7	25	3	33	52	37	80	69	71	66	49	45	20	
8	32	9	32	46	67	58	72	58	58	60	39	20	8	15	10	34	42	44	72	70	72	69	58	46	28	
9	22	9	34	40	50	59	70	70	63	70	36	19	9	20	15	34	47	37	71	72	72	74	40	43	31	
10	19	9	39	35	46	59	71	68	69	68	31	18	10	30	9	29	43	44	65	72	73	75	33	37	33	
11	17	11	33	30	50	61	74	64	67	55	32	20	11	30	20	25	44	60	55	68	73	73	51	44	32	
12	23	10	23	32	65	66	63	65	52	48	35	21	12	33	37	20	55	70	56	70	64	74	41	30	40	
13	23	23	27	30	59	70	67	74	62	41	33	9	13	32	41	22	64	64	72	73	64	65	56	27	44	
14	15	24	25	35	47	68	73	65	55	46	34	7	14	35	13	22	52	55	65	76	67	57	52	31	52	
15	18	1	28	40	59	68	73	74	52	47	38	12	15	41	11	18	40	68	63	72	71	60	58	31	27	
16	22	0	28	30	49	59	76	72	59	48	40	17	16	25	18	20	40	72	65	67	73	68	59	34	28	
17	12	6	31	39	54	63	75	70	69	58	45	19	17	28	28	18	49	76	66	66	73	68	62	48	24	
18	7	11	32	43	48	69	80	65	64	42	26	18	18	32	32	25	56	70	65	67	74	74	58	43	16	
19	28	7	36	28	51	67	67	65	65	58	51	23	19	32	38	24	62	55	68	76	76	74	53	35	21	
20	32	15	28	32	58	70	71	68	52	51	47	27	20	60	49	20	56	52	64	77	78	72	50	37	29	
21	33	83	36	37	64	67	70	75	40	45	35	26	21	62	57	25	44	58	64	75	76	72	51	45	28	
22	31	23	42	49	60	64	64	48	39	41	30	22	52	38	11	39	73	61	68	77	78	73	64	53	33	
23	— 4	31	28	47	55	62	70	61	63	32	24	32	27	34	16	38	57	48	75	72	72	61	59	42	33	
24	2	39	30	48	62	65	66	63	68	39	3															

## SUPPLEMENT NO. 2.

TABLE 6.—*Daily mean temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*[ $m = \frac{1}{2}(7a+2p+9m+9d)$ .]

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1907																									
1.....	32	31	39	27	41	52	70	64	73	52	48	23	1.....	18	15	41	38	35	67	71	73	52	47	53	38
2.....	37	21	32	36	45	48	57	58	65	62	48	23	2.....	28	28	34	41	38	68	71	71	59	50	48	39
3.....	42	11	21	52	47	58	63	55	63	40	25	3.....	42	27	32	37	39	68	60	74	59	51	45	47	
4.....	30	10	30	51	39	56	67	62	62	56	40	19	4.....	45	42	26	42	47	66	62	71	64	50	46	47
5.....	37	10	28	30	47	54	70	63	60	48	42	25	5.....	36	51	32	62	67	69	64	73	54	51	44	38
6.....	52	8	24	36	48	55	74	71	62	57	37	32	6.....	10	31	37	59	64	66	68	70	56	51	46	24
7.....	57	18	30	43	48	68	71	72	61	57	37	41	7.....	10	31	34	42	52	61	66	71	58	52	45	20
8.....	40	22	30	38	49	56	78	67	64	43	38	47	8.....	23	30	33	34	58	57	66	75	65	59	45	4
9.....	18	30	28	31	57	58	74	67	64	49	39	48	9.....	32	34	48	29	52	62	73	76	65	58	44	15
10.....	27	28	28	33	40	60	72	73	61	50	32	26	10.....	36	17	31	26	44	61	74	69	66	56	56	15
11.....	31	12	35	34	40	63	67	75	60	41	28	24	11.....	18	24	30	44	49	63	72	66	63	44	62	24
12.....	32	17	44	34	56	61	65	71	62	42	29	24	12.....	1	33	31	58	58	66	71	68	67	32	50	33
13.....	34	38	34	31	71	56	70	69	64	40	32	26	13.....	17	28	37	34	62	67	72	74	73	38	59	36
14.....	35	29	30	30	71	67	71	69	71	42	23	14.....	31	23	31	37	64	60	73	70	75	42	61	30	
15.....	23	34	37	38	52	65	76	75	72	46	27	30	15.....	23	20	32	44	67	57	69	75	64	33	42	24
16.....	25	32	48	36	47	67	77	75	74	55	26	26	16.....	17	14	27	60	57	66	68	71	58	42	46	24
17.....	27	31	42	32	63	75	77	74	68	54	35	26	17.....	21	21	21	58	54	62	66	68	64	43	33	10
18.....	33	42	34	37	64	74	73	65	68	40	37	26	18.....	15	35	32	63	53	64	66	66	56	39	32	10
19.....	54	33	48	37	58	70	75	71	74	43	37	21	19.....	30	36	39	44	56	62	61	71	60	39	43	15
20.....	16	24	35	38	43	72	73	67	71	37	45	30	20.....	32	31	31	42	58	70	70	66	71	47	53	15
21.....	15	12	50	43	46	73	75	56	57	37	44	29	21.....	43	32	30	49	58	74	72	62	70	58	44	16
22.....	6	7	65	50	50	76	73	64	48	42	33	28	22.....	51	34	32	45	57	75	72	62	70	46	37	24
23.....	8	18	64	44	52	73	73	69	57	46	33	33	23.....	59	41	38	37	57	71	64	68	66	56	36	24
24.....	15	29	44	50	54	71	76	66	58	43	32	30	24.....	50	29	38	43	58	72	66	74	51	33	31	20
25.....	14	23	51	40	55	72	77	62	44	42	40	34	25.....	41	22	30	47	57	73	67	76	49	44	30	25
26.....	4	24	66	38	63	62	65	65	49	39	34	33	26.....	34	38	39	46	60	76	71	75	47	48	39	15
27.....	12	20	66	46	38	62	64	65	54	41	42	53	27.....	33	31	36	44	60	72	69	71	45	39	49	14
28.....	14	24	54	59	50	68	69	69	57	34	35	29	28.....	28	25	34	38	60	78	79	77	48	30	48	14
29.....	21	.....	56	57	59	67	70	69	50	39	29	31	29.....	30	.....	33	41	64	70	75	64	51	37	32	7
30.....	12	.....	44	37	54	74	68	71	48	37	30	34	30.....	17	.....	36	48	66	72	74	62	48	53	28	7
31.....	21	.....	30	.....	54	.....	68	68	44	.....	30	31	31.....	4	.....	34	.....	66	.....	69	61	.....	59	21	
1908																									
1.....	29	17	33	41	40	58	71	70	63	43	33	26	1.....	35	26	39	47	50	44	78	72	60	60	.....	28
2.....	26	8	29	28	37	64	69	74	58	41	36	18	2.....	20	38	37	50	52	47	78	73	66	55	.....	27
3.....	30	16	25	31	44	63	69	76	56	46	50	26	3.....	16	27	37	58	44	49	75	76	73	71	.....	25
4.....	32	11	28	38	45	64	70	76	61	52	25	31	4.....	12	28	41	62	44	55	65	65	70	66	31	21
5.....	22	29	32	46	47	69	74	71	67	58	32	21	5.....	24	19	48	60	46	54	72	62	74	66	34	21
6.....	30	20	42	52	49	72	80	67	66	58	43	32	6.....	14	9	47	40	48	55	73	65	70	46	29	22
7.....	33	19	35	45	48	76	64	65	58	56	42	20	7.....	11	25	29	40	50	56	72	66	43	35	19	
8.....	25	7	33	44	46	74	63	64	60	45	46	17	8.....	21	34	33	53	51	62	77	69	72	52	37	11
9.....	20	13	31	44	51	63	66	66	65	45	42	16	9.....	18	25	32	55	54	60	77	68	54	48	55	24
10.....	28	28	39	51	58	64	71	67	70	49	37	30	10.....	15	20	31	53	56	59	70	68	54	49	34	20
11.....	33	34	44	40	63	60	81	74	73	42	30	33	11.....	24	22	34	56	48	64	73	65	60	58	30	23
12.....	32	43	48	48	67	64	82	72	73	39	26	30	12.....	30	20	42	39	46	60	71	68	49	36	19	
13.....	20	38	41	48	57	73	76	72	66	50	23	28	13.....	28	18	37	48	41	67	68	70	59	53	36	30
14.....	23	33	48	62	62	50	63	75	64	65	23	37	14.....	24	29	26	59	41	68	73	75	54	64	33	20
15.....	32	28	40	44	65	53	65	70	64	65	28	40	15.....	25	42	32	61	49	71	76	77	56	62	34	20
16.....	20	20	33	34	70	58	74	78	64	60	27	35	16.....	27	20	38	58	57	71	74	74	58	62	32	18
17.....	25	15	37	46	70	65	74	72	63	64	37	34	17.....	36	14	32	47	56	76	66	77	63	64	28	22
18.....	28	20	33	48	67	78	71	67	66	38	33	30	18.....	30	10	43	44	55	78	65	69	65	65	30	28
19.....	33	25	29	51	61	75	66	61	75	56	52	29	19.....	31	14	53	40	65	75	67	63	68	64	28	18
20.....	36	17	29	50	66	74	68	57	70	55	37	30	20.....	37	30	46	39	64	76	70	64	66	55	31	17
21.....	41	21	39	46	65	76	70	64	56	38	27	21.....	25	26	45	46	70	74	76	71	61	52	33	28	
22.....	33	21	47	60	70	81	72	62	71	50	53	23	22.....	22	23	56	53	70	73	72	58	43	34	29	
23.....	16	24	44	64	65	78	70	62	73	55	55	31	23.....	28	7	47	33	62	80	77	72	59	45	39	18
24.....	20	21	38	67	66	68	69	60	73	57	52	29	24.....	26	9	64									

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 6.—*Daily mean temperatures (°F.), Wauseon, Ohio, 1883–1912—Concluded.*[ $m = \frac{1}{4} (7a + 2p + 9m + 9d)$ .]

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1911														1912												
1.....	38	32	32	24	49	64	78	71	70	53	35	31	1.....	22	23	11	34	53	72	66	62	80	48	34	51	
2.....	20	28	34	30	39	67	82	73	76	50	27	31	2.....	18	6	14	33	62	59	69	58	78	52	30	38	
3.....	13	29	33	32	42	67	85	70	74	60	32	22	3.....	14	0	14	35	57	70	73	57	72	54	33	35	
4.....	13	30	26	44	46	70	84	70	67	57	38	20	4.....	6	-2	16	51	60	59	77	57	72	55	46	40	
5.....	12	20	31	44	47	72	84	76	66	48	42	28	5.....	-2	5	15	58	64	65	78	62	77	58	51	54	
6.....	23	21	30	45	55	69	80	78	64	65	50	32	6.....	1	16	21	63	67	61	75	66	78	66	54	30	
7.....	32	19	26	36	59	62	74	78	67	45	43	38	7.....	-2	18	29	35	65	51	76	65	68	48	40	30	
8.....	29	25	32	33	67	66	78	74	69	44	37	45	8.....	9	4	30	44	59	56	76	70	71	54	45	22	
9.....	23	24	46	39	67	76	82	75	68	52	44	49	9.....	1	0	18	54	53	61	76	68	74	62	42	24	
10.....	38	17	40	43	72	83	77	77	69	56	56	55	10.....	2	-4	22	46	63	64	75	63	74	58	52	35	
11.....	41	29	50	50	67	73	75	70	72	48	63	42	11.....	6	14	27	55	63	70	72	66	66	68	59	19	
12.....	33	34	37	50	63	65	72	68	58	52	18	35	12.....	2	5	29	49	48	68	75	71	59	48	59	10	
13.....	34	37	30	56	53	59	66	72	55	51	19	32	13.....	2	9	25	43	46	59	75	74	66	47	42	30	
14.....	34	42	41	45	57	60	67	75	61	53	27	31	14.....	15	27	33	57	49	67	76	70	70	46	32	33	
15.....	24	35	17	39	72	65	74	74	70	52	29	32	15.....	4	30	24	60	51	69	73	65	70	43	29	38	
16.....	17	44	18	42	73	64	66	75	66	64	26	33	16.....	9	28	26	51	50	68	66	62	59	43	38	36	
17.....	17	45	35	41	76	61	61	73	66	54	36	30	17.....	29	29	42	37	51	64	73	70	61	54	32	40	
18.....	24	30	31	54	76	68	69	68	71	49	30	30	18.....	29	35	37	38	63	57	60	76	62	61	37	31	
19.....	26	22	39	49	79	73	70	59	60	54	30	26	19.....	10	34	42	40	52	60	62	73	56	44	26	26	
20.....	37	17	44	49	78	76	67	63	59	51	31	32	20.....	16	28	22	47	71	64	66	74	62	46	51	30	
21.....	26	19	53	46	76	70	68	68	60	48	31	39	21.....	21	18	23	59	70	60	72	69	67	58	42	20	
22.....	20	27	38	39	70	78	64	68	60	42	32	39	22.....	31	18	22	47	74	63	69	65	54	54	40	23	
23.....	27	31	27	42	67	79	66	63	62	41	34	30	23.....	28	30	29	40	76	66	71	59	55	43	37	25	
24.....	34	36	29	47	64	73	58	56	66	42	28	33	24.....	16	36	26	47	65	68	80	72	62	42	32	28	
25.....	39	41	47	51	70	72	58	60	63	46	32	34	25.....	17	34	25	53	61	71	74	80	67	46	31	32	
26.....	46	40	51	56	76	78	60	66	57	48	37	36	26.....	18	31	36	60	68	75	68	74	45	41	33	33	
27.....	44	29	33	60	79	73	66	71	64	33	40	23	27.....	9	19	34	48	75	69	68	58	47	49	27	29	
28.....	35	23	28	61	82	65	70	64	57	35	36	16	28.....	19	21	34	41	66	74	73	63	50	54	28	31	
29.....	42	42	33	63	66	65	68	58	57	40	27	28	29.....	24	15	34	43	55	78	68	59	44	59	35	35	
30.....	21	30	64	64	71	70	57	53	42	26	33	30.....	20	35	49	56	65	68	61	47	40	34	35	35		
31.....	22	29	.....	65	.....	78	61	.....	43	.....	25	31.....	13	.....	44	.....	65	.....	58	79	.....	43	.....	34		

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## SUPPLEMENT NO. 2.

TABLE 7.—*Daily maximum temperatures (°F.), Wauseon, Ohio, 1883–1912.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1883																									
1.....	27	10	60	35	67	69	81	83	80	62	40	54	1.....	21	31	41	59	57	80	78	88	67	78	38	40
2.....	28	17	51	42	73	81	89	81	83	62	50	44	2.....	16	21	36	62	58	80	79	72	70	78	42	42
3.....	28	34	33	48	83	79	92	72	72	62	52	34	3.....	25	44	43	39	54	80	84	68	74	64	40	39
4.....	18	33	31	58	72	77	92	74	78	55	63	50	4.....	35	39	36	44	62	84	88	79	65	47	52	49
5.....	23	16	30	56	56	85	89	76	72	57	66	51	5.....	41	28	38	63	67	74	90	75	70	48	54	34
6.....	28	17	38	48	68	83	90	78	75	62	61	52	6.....	47	13	38	60	59	77	88	71	72	48	63	23
7.....	28	25	23	42	81	79	86	79	68	59	47	55	7.....	39	28	32	61	52	87	83	75	73	54	69	15
8.....	29	27	32	56	68	80	74	78	62	73	65	52	8.....	48	34	31	57	51	74	88	80	75	52	42	34
9.....	23	29	49	70	77	78	74	82	64	85	65	46	9.....	43	20	39	34	47	72	86	91	67	59	40	53
10.....	17	17	39	70	73	66	81	84	69	77	56	48	10.....	34	10	37	47	45	75	78	84	56	68	44	24
11.....	23	33	28	58	61	71	83	84	74	60	57	46	11.....	44	2	32	42	65	81	81	82	70	72	63	19
12.....	20	38	39	56	63	79	80	85	76	65	34	47	12.....	45	18	30	47	61	84	86	86	80	64	66	24
13.....	36	43	.51	56	58	74	84	68	84	58	51	56	13.....	20	16	30	35	72	85	83	84	73	57	62	35
14.....	14	35	62	84	70	75	85	72	87	57	38	46	14.....	27	31	44	40	76	90	82	67	80	56	36	30
15.....	24	42	50	74	64	77	83	77	89	49	25	20	15.....	29	40	39	45	78	82	87	73	75	64	33	26
16.....	32	60	33	60	67	87	86	81	78	51	26	19	16.....	24	33	18	47	81	70	90	76	70	71	45	37
17.....	36	37	52	70	68	89	79	85	70	59	47	19	17.....	17	11	18	40	83	74	91	81	76	76	55	38
18.....	32	26	69	76	72	85	76	82	69	60	52	30	18.....	2	17	28	43	81	79	85	82	79	66	53	43
19.....	35	32	21	65	82	78	78	89	68	69	60	25	19.....	0	8	19	65	68	82	91	80	81	64	48	35
20.....	34	42	29	60	62	76	74	80	77	48	58	24	20.....	9	10	12	75	77	76	98	81	77	61	38	33
21.....	21	32	34	61	52	78	86	85	64	43	61	20	21.....	9	14	21	78	80	79	97	85	84	44	41	47
22.....	—	33	33	47	40	84	91	93	73	50	63	18	22.....	8	23	23	67	66	88	81	79	56	36	54	54
23.....	2	29	33	48	68	85	87	78	72	43	48	30	23.....	22	31	28	82	74	92	80	60	56	36	52	39
24.....	29	40	42	39	76	82	71	80	66	44	56	34	24.....	33	31	35	68	82	79	94	80	74	58	34	28
25.....	20	44	41	56	80	71	81	82	62	50	60	27	25.....	28	34	35	52	77	83	92	73	83	64	39	28
26.....	28	25	44	67	69	82	81	76	64	53	59	38	26.....	15	38	52	63	80	86	80	69	88	68	31	31
27.....	40	31	40	69	67	70	80	75	72	50	36	38	27.....	3	44	47	68	73	84	86	67	82	68	35	38
28.....	32	44	34	52	65	70	78	74	64	60	46	27	28.....	6	51	45	62	70	84	91	72	80	52	42	37
29.....	38.....	41	55	71	78	73	78	69	64	45	46	29.....	16.....	41	64	77	72	92	78	82	80	50	48	40	
30.....	43.....	42	62	65	79	77	78	78	55	59	42	39	30.....	36.....	48	58	72	74	90	90	74	80	39	46	51
31.....	19.....	39	.....	63	.....	80	81	.....	51	.....	38	31.....	32.....	56	.....	77	.....	94	94	74	.....	38	.....	46	
1884																									
1.....	29	28	20	48	79	82	92	84	79	69	63	34	1.....	45	21	26	37	60	83	82	90	70	47	70	26
2.....	23	42	24	36	64	84	87	88	87	85	50	36	2.....	38	11	29	39	73	84	84	78	76	58	71	14
3.....	10	30	23	51	68	85	83	84	89	88	44	46	3.....	52	12	38	38	70	71	89	78	83	66	59	26
4.....	0	28	24	61	64	87	83	74	92	88	44	53	4.....	52	11	42	40	73	74	92	74	84	70	54	19
5.....	2	50	30	53	76	86	81	68	94	85	43	53	5.....	32	13	38	39	72	77	96	66	85	68	56	27
6.....	1.....	32	38	54	67	81	76	79	91	79	41	53	6.....	25	30	48	32	75	83	98	78	88	70	45	32
7.....	15	31	28	56	61	79	82	72	92	76	56	51	7.....	16	28	44	46	66	82	99	83	77	41	41	42
8.....	17	35	25	44	62	86	82	71	92	67	52	35	8.....	16	50	34	58	74	80	85	88	90	79	40	46
9.....	22	34	29	44	69	83	77	73	95	62	63	35	9.....	18	52	33	60	62	78	87	91	87	81	37	52
10.....	34	28	33	46	68	56	86	76	93	72	63	36	10.....	12	52	39	60	70	81	90	89	77	80	49	52
11.....	34	29	52	51	67	70	88	73	83	81	48	35	11.....	5	57	46	50	76	81	88	95	76	82	46	56
12.....	24	37	51	58	72	83	86	77	72	48	31	12.....	7	51	40	65	82	90	87	80	71	34	44	44	
13.....	44	45	55	56	63	71	77	88	72	72	58	28	13.....	20	42	39	69	79	76	89	87	75	84	41	30
14.....	37	31	38	71	66	69	81	90	78	60	58	34	14.....	32	38	37	81	80	92	78	74	76	72	48	30
15.....	22	26	41	60	72	74	77	91	88	64	62	32	15.....	31	64	78	65	95	83	83	82	76	62	48	30
16.....	21	43	46	48	63	84	80	92	81	59	62	24	16.....	37	21	43	81	59	89	90	92	81	51	48	26
17.....	34	40	53	50	74	89	79	94	80	68	50	15	17.....	22	40	47	79	67	78	86	80	70	50	32	32
18.....	34	45	41	55	78	85	87	92	70	64	36	8.....	27	48	64	78	74	73	82	81	71	62	41	24	
19.....	30	58	39	58	68	88	83	92	70	74	39	8.....	32	40	75	78	79	76	82	80	70	77	36	25	
20.....	16	34	39	53	75	89	83	93	74	78	43	14	20.....	30	26	68	75	81	83	78	87	67	78	46	25
21.....	14	36	48	48	82	90	87	88	77	76	54	25	21.....	34	35	55	79	83	78	86	92	61	62	51	38
22.....	35	39	57	46	80	91	90	80	81	62	55	26	22.....	27	38	34	83	89	86	80	73	69	50	37	37
23.....	31	28	63	56	82	92	88	82	74	42	58	14	23.....	13	38	42	84	86	81	88	79	72	71	59	33
24.....	12	28	59	67	72	90	81	77	76	44	25	20	24.....	24	49	58	78	77	79	90	73</				

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 7.—*Daily maximum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1887																									
1.....	23	15	51	52	73	71	92	95	90	61	59	32	1.....	39	26	33	40	62	53	87	82	88	66	49	43
2.....	13	27	62	59	82	63	90	98	78	71	67	34	2.....	43	35	35	56	45	56	92	81	84	63	62	51
3.....	5	31	35	76	72	78	92	100	76	69	60	50	3.....	48	32	49	52	64	73	84	80	86	76	53	48
4.....	19	27	37	64	71	85	81	97	60	56	60	58	4.....	45	40	35	45	74	62	79	79	84	63	51	30
5.....	24	23	32	42	60	86	86	100	71	48	52	36	5.....	36	40	46	41	78	69	84	78	74	66	38	43
6.....	15	38	54	46	74	79	90	87	95	71	67	47	6.....	37	18	46	48	84	77	85	81	79	49	48	47
7.....	18	48	57	50	74	85	92	84	80	83	68	41	7.....	33	20	40	58	87	72	88	83	80	53	50	47
8.....	12	56	56	69	78	87	94	91	81	78	54	39	8.....	39	35	36	64	88	74	91	81	82	62	44	60
9.....	18	42	58	80	77	78	86	98	68	66	49	39	9.....	44	29	30	60	87	75	93	80	86	68	49	56
10.....	11	52	50	80	76	77	85	99	75	66	44	42	10.....	28	35	37	68	91	64	92	81	88	70	48	54
11.....	23	51	42	84	80	79	90	91	86	51	49	40	11.....	31	34	47	58	83	73	86	77	84	80	48	54
12.....	28	20	52	84	80	82	92	88	94	52	51	31	12.....	34	22	56	67	78	78	89	80	84	66	59	55
13.....	31	28	50	68	85	85	98	85	92	58	53	39	13.....	38	22	57	52	69	81	91	80	72	84	53	61
14.....	35	37	31	78	72	87	90	70	79	58	56	44	14.....	30	32	52	50	78	80	71	78	86	53	47	41
15.....	27	41	36	74	84	90	98	87	74	60	46	35	15.....	34	31	69	56	74	83	80	75	90	66	42	46
16.....	32	39	41	49	83	89	96	87	79	71	57	33	16.....	55	51	66	67	78	85	83	75	63	69	44	48
17.....	36	37	36	43	63	90	101	70	69	73	47	27	17.....	54	52	71	74	89	78	86	80	66	41	47	47
18.....	10	49	30	39	75	91	91	88	84	59	48	40	18.....	29	33	51	79	91	84	82	80	60	65	42	49
19.....	31	32	49	56	84	88	89	82	84	62	40	44	19.....	28	17	58	78	72	85	88	86	67	70	50	51
20.....	46	29	52	61	89	91	92	86	87	68	26	39	20.....	37	17	42	76	74	82	78	86	66	56	49	55
21.....	36	32	42	66	92	77	86	74	88	48	27	34	21.....	26	44	48	64	56	72	83	80	63	51	53	43
22.....	57	41	34	60	89	74	88	82	71	51	39	16	22.....	41	36	58	58	55	72	86	82	69	48	46	53
23.....	59	34	42	61	87	61	79	74	57	56	42	25	23.....	48	9	66	73	60	70	79	85	79	50	43	49
24.....	38	34	55	52	79	73	85	74	62	47	42	26	24.....	46	16	67	72	72	73	77	87	84	54	58	64
25.....	46	32	44	53	68	81	91	74	69	40	42	27	25.....	49	25	50	51	61	80	79	90	68	52	44	62
26.....	32	45	39	57	64	78	92	62	68	45	58	20	26.....	48	36	60	62	67	81	85	90	58	48	37	58
27.....	34	21	32	61	74	80	97	73	55	55	61	35	27.....	32	45	54	68	57	84	89	90	60	43	40	46
28.....	44	31	28	62	81	86	96	78	67	60	24	34	28.....	29	36	48	52	62	83	85	87	77	51	31	47
29.....	43	25	60	81	91	94	79	74	52	30	22	29.....	35	39	49	46	84	74	90	67	44	29	64	30	
30.....	36.....	39	68	65	92	97	82	67	44	31	19	30.....	31	41	42	83	80	94	97	64	49	23	36		
31.....	8	45	72	95	86	88	86	56	56	39	31	31.....	36	38	50	50	83	88	88	51	51	38	38		
1888																									
1.....	41	32	41	65	44	70	80	86	76	.....	76	40	1.....	54	37	24	46	60	84	88	92	80	64	54	33
2.....	19	38	58	51	58	67	82	88	84	.....	68	33	2.....	56	41	28	60	66	85	84	98	84	74	48	26
3.....	25	32	31	50	79	70	89	98	85	.....	60	38	3.....	36	52	33	58	77	88	83	100	88	75	41	26
4.....	38	35	20	62	68	76	89	92	86	.....	64	44	4.....	44	64	33	56	66	90	79	97	88	69	44	24
5.....	34	34	27	74	68	84	91	90	73	.....	70	38	5.....	58	62	22	55	54	85	79	87	82	67	64	30
6.....	44	29	38	57	80	82	85	90	71	56	67	35	6.....	58	34	27	63	49	78	84	90	84	69	65	41
7.....	44	36	38	58	81	68	86	88	76	65	46	48	7.....	33	30	25	60	57	73	93	86	88	64	69	30
8.....	38	20	44	52	76	82	84	88	88	60	54	40	8.....	34	28	34	76	61	78	96	91	70	71	46	31
9.....	27	10	45	61	73	86	73	78	86	57	56	38	9.....	42	32	45	62	58	76	80	90	65	73	64	30
10.....	21	20	45	58	77	79	83	83	86	64	48	47	10.....	45	43	37	43	50	81	78	80	63	69	41	44
11.....	13	26	44	63	84	72	88	86	92	55	48	40	11.....	66	50	56	62	59	82	86	82	66	58	48	40
12.....	32	37	26	49	66	78	86	66	78	46	56	31	12.....	64	39	53	69	80	83	93	87	71	62	54	32
13.....	39	46	27	55	48	85	76	79	72	51	59	28	13.....	64	46	50	75	62	84	86	87	63	82	56	35
14.....	39	46	33	57	48	84	77	83	78	58	62	33	14.....	32	42	38	63	65	82	91	85	69	58	60	44
15.....	32	37	33	57	46	84	77	83	78	58	62	30	15.....	37	45	28	48	65	86	91	89	98	66	51	46
16.....	25	19	50	40	58	90	80	86	82	50	50	43	16.....	33	53	34	57	62	89	88	92	68	57	50	34
17.....	15	38	45	55	61	94	83	93	68	62	45	47	17.....	29	60	42	03	60	90	94	74	71	64	53	34
18.....	22	43	33	65	64	98	87	88	70	56	38	47	18.....	38	53	49	61	74	84	83	79	77	65	57	42
19.....	15	50	45	57	56	96	86	83	66	48	38	25	19.....	38	33	43	50	57	88	80	73	70	59	51	34
20.....	19	47	71	48	62	95	84	86	75	54	42	29	20.....	53	38	54	62	58	78	79	80	81	58	56	44
21.....	18	49	56	46	67	98	88	78	78	44	37	32	21.....	53	38	42	49	54	74	93	83	72	65	54	20
22.....	11	39	39	51	74	93	87	84	77	45	37	30	22.....	26	25	61	71	57	81	82	72	69	58	63	50
23.....	26	47	16	48	79	94	83	74	75	44	40	31	23.....	22	22	38	46	78	86	85	75	53	46	48	32
24.....	25	52	33	55	77	88	89	80	74	44	46	50	24.....	30	36	44	71</								

## SUPPLEMENT NO. 2.

TABLE 7.—*Daily maximum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1891																									
1.....	53	42	23	51	70	87	75	84	78	72	43	43	1.....	34	37	39	65	68	75	79	86	86	71	64	29
2.....	47	46	29	55	67	82	83	78	84	88	45	42	2.....	31	23	46	58	54	76	87	88	76	82	68	20
3.....	25	47	28	42	64	80	75	78	70	83	43	59	3.....	17	34	38	73	57	84	81	89	82	64	50	28
4.....	27	14	29	36	53	70	78	86	68	75	46	56	4.....	15	20	24	65	52	84	77	92	91	68	53	22
5.....	30	39	37	40	52	65	79	89	63	62	43	50	5.....	22	39	32	71	55	80	83	95	96	72	59	31
6.....	32	50	24	40	59	56	81	93	76	63	51	35	6.....	25	43	45	56	65	72	70	83	89	70	65	25
7.....	30	37	33	48	68	67	67	95	73	50	63	32	7.....	27	30	52	82	59	78	92	.....	97	70	66	30
8.....	30	38	41	51	75	76	71	96	73	64	59	41	8.....	22	14	50	73	65	81	90	.....	78	77	68	40
9.....	32	42	36	40	81	85	78	98	76	67	60	45	9.....	26	37	58	61	71	84	83	82	65	55	35	
10.....	33	30	46	69	84	85	82	100	79	68	59	49	10.....	9	39	54	53	80	87	81	.....	85	84	57	35
11.....	34	41	54	50	65	83	86	93	83	58	50	51	11.....	5	34	58	53	83	78	88	.....	82	84	50	29
12.....	33	49	46	60	68	77	88	87	84	57	43	49	12.....	20	40	42	74	71	79	93	.....	80	85	60	37
13.....	26	47	34	74	74	83	91	86	81	67	37	52	13.....	14	37	61	66	56	79	95	76	78	65	51	29
14.....	36	40	24	72	75	93	84	79	75	.....	41	53	14.....	9	41	54	43	69	81	92	78	86	57	36	34
15.....	36	56	37	52	82	92	74	83	86	49	48	58	15.....	-1	25	49	66	84	91	90	87	51	30	56	
16.....	26	52	42	60	63	94	88	90	90	59	57	40	16.....	7	35	30	57	54	83	88	77	68	58	42	51
17.....	28	53	44	79	67	90	88	87	93	65	38	27	17.....	9	22	36	59	61	88	87	86	73	66	52	37
18.....	28	43	62	75	76	72	80	91	93	54	27	35	18.....	28	31	38	54	69	90	83	89	80	88	46	35
19.....	34	32	32	74	82	78	82	94	90	48	38	42	19.....	26	35	38	46	77	95	85	79	90	71	38	28
20.....	41	50	41	66	78	82	82	85	93	53	39	43	20.....	21	16	49	55	87	91	83	83	77	53	42	
21.....	39	50	36	81	80	85	90	85	95	58	54	56	21.....	28	19	50	44	76	87	89	83	90	63	39	42
22.....	38	33	46	78	66	83	93	77	93	49	52	57	22.....	29	34	40	38	87	77	90	86	78	67	40	51
23.....	38	49	51	67	64	86	88	67	94	53	49	40	23.....	34	33	69	45	76	85	86	93	73	74	29	59
24.....	31	55	44	61	74	87	87	62	95	56	37	40	24.....	20	36	64	52	73	86	90	92	58	65	25	
25.....	39	57	44	66	74	92	78	76	96	69	34	53	25.....	33	31	36	46	74	86	95	86	58	56	28	
26.....	37	30	35	74	64	90	77	79	88	66	48	52	26.....	31	39	36	.61	55	84	88	87	64	56	40	33
27.....	48	27	37	74	66	77	82	73	93	50	32	33	27.....	22	48	48	46	61	87	81	90	71	49	42	
28.....	36	27	47	65	67	86	83	71	91	49	31	45	28.....	49	43	40	64	63	84	90	88	63	43	42	
29.....	46.....	58	71	59	88	84	75	69	68	31	45	29.....	45.....	48	49	74	83	89	74	68	42	43	27		
30.....	40.....	48	79	77	79	82	74	74	69	70	28	44	30.....	27.....	60	44	77	88	92	83	51	45	34	35	
31.....	44.....	50.....	50	85	83	83	78	76	.....	66	41	41	31.....	34	67	78	.....	91	82	82	57	57	57		
1892																									
1.....	55	45	33	74	67	80	73	85	71	69	54	34	1.....	41	31	50	48	74	71	90	95	90	70	61	38
2.....	51	40	37	72	72	80	71	84	78	65	56	33	2.....	51	35	52	48	68	79	86	88	98	80	68	32
3.....	26	36	47	63	75	68	71	88	86	81	50	41	3.....	50	36	58	60	80	85	85	71	96	75	49	39
4.....	27	37	40	70	66	78	76	81	88	67	48	40	4.....	52	27	67	60	74	77	84	81	86	53	49	47
5.....	33	34	39	70	59	75	78	81	76	55	38	35	5.....	57	37	70	41	66	64	82	86	80	53	46	47
6.....	28	38	41	57	67	83	78	86	72	63	54	52	6.....	36	50	60	56	75	65	82	90	81	62	45	50
7.....	22	54	48	64	58	77	79	89	65	73	56	59	7.....	26	43	43	58	68	75	78	96	93	70	34	58
8.....	20	36	39	53	56	75	87	93	72	43	33	52	8.....	35	42	47	51	68	86	82	98	92	59	36	45
9.....	12	30	54	33	61	78	89	95	85	64	33	33	9.....	36	58	53	43	79	91	86	88	86	50	34	41
10.....	17	35	28	39	67	78	88	84	82	68	44	32	10.....	40	44	67	43	85	92	89	81	77	58	38	
11.....	30	34	30	47	55	85	90	88	86	75	39	30	11.....	36	35	61	47	69	96	95	83	70	61	35	47
12.....	30	28	50	52	56	90	89	84	77	76	39	32	12.....	25	25	57	59	79	95	96	89	71	55	37	
13.....	22	32	33	52	60	89	87	84	65	78	58	43	13.....	48	29	57	67	80	94	91	95	81	51	36	47
14.....	27	40	29	37	58	83	88	87	60	81	49	42	14.....	48	27	47	65	85	91	89	88	87	51	37	55
15.....	21	25	33	52	69	88	90	92	69	71	46	37	15.....	46	30	56	68	66	95	92	88	82	57	57	
16.....	25	26	34	54	71	91	76	90	71	75	56	40	16.....	44	23	62	78	84	95	96	81	79	72	51	39
17.....	34	36	26	48	75	88	82	94	74	69	59	35	17.....	51	37	76	76	87	89	99	84	79	68	37	
18.....	26	42	29	50	71	89	82	93	79	80	45	35	18.....	53	39	78	79	72	78	99	95	74	69	39	45
19.....	20	35	32	50	62	81	86	76	71	65	34	34	19.....	42	37	67	71	40	80	100	82	72	81	33	57
20.....	15	35	35	51	61	84	86	83	68	60	36	25	20.....	56	15	50	62	48	90	90	86	82	78	47	
21.....	27	37	39	62	64	87	90	84	80	68	41	21	21.....	50	18	71	51	55	97	80	79	80	42	45	
22.....	36	43	46	52	53	86	93	87	80	68	34	20	22.....	38	26	59	47	51	96	83	87	79	56	30	
23.....	30	41	41	67	65	85	96	90	87	57	30	23	23.....	31	24	51	53	62	97	85	91	70	65	58	
24.....	41	55	51	51	69	81	99	89	87	55	31	22	24.....	32	11	47	66	70	94	92	92	64	58	43	
25.....	43	45	60	47	71	75	97	78</																	

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 7.—*Daily maximum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1895																									
1.....	32	28	52	39	76	96	86	83	75	65	46	36	1.....	53	28	41	52	44	68	89	79	82	94	52	31
2.....	35	21	34	46	83	96	84	87	82	72	52	33	2.....	56	37	36	57	44	83	93	89	.....	72	50	30
3.....	33	23	48	49	88	100	84	92	90	76	65	18	3.....	57	36	45	60	51	73	96	95	.....	75	60	34
4.....	22	15	18	55	92	84	89	94	75	69	65	25	4.....	58	32	39	64	67	66	98	83	86	82	65	36
5.....	23	13	29	67	94	74	95	93	85	69	73	22	5.....	28	36	54	54	77	74	95	81	92	89	56	31
6.....	43	2	36	75	77	74	96	80	86	73	70	26	6.....	23	37	37	46	80	79	87	82	91	72	51	31
7.....	37	6	42	59	78	81	93	85	81	64	72	39	7.....	26	35	35	41	69	63	93	86	91	66	46	36
8.....	32	3	40	57	77	88	95	93	80	51	62	32	8.....	39	36	45	46	78	70	99	84	97	82	57	51
9.....	28	19	41	57	86	91	80	96	88	51	42	31	9.....	41	30	62	41	83	72	102	83	98	62	47	53
10.....	31	20	40	54	88	95	81	98	96	62	39	31	10.....	36	31	51	49	76	77	101	81	97	69	51	57
11.....	32	21	28	58	74	95	87	86	97	58	43	31	11.....	30	31	55	40	76	84	77	83	89	72	48	52
12.....	19	21	39	58	55	91	92	89	95	59	45	20	12.....	26	34	48	49	72	83	80	81	94	66	43	38
13.....	17	26	38	62	50	88	83	88	74	67	45	26	13.....	26	34	32	60	60	90	71	87	99	71	47	43
14.....	16	32	24	52	44	92	92	92	76	60	55	36	14.....	29	38	35	51	57	91	80	85	93	89	40	51
15.....	32	36	20	60	50	82	92	99	81	57	49	30	15.....	30	35	41	59	66	93	82	87	98	91	62	41
16.....	36	36	30	50	61	90	99	96	82	64	46	38	16.....	35	41	40	48	70	80	84	70	97	86	61	42
17.....	28	34	39	57	65	93	92	97	92	60	42	47	17.....	54	46	41	51	73	84	81	71	70	58	38	25
18.....	39	32	51	60	72	94	92	91	93	69	48	51	18.....	33	40	65	65	79	77	86	78	75	62	38	20
19.....	31	35	43	72	63	81	98	84	96	57	38	57	19.....	27	42	49	57	79	80	89	76	70	81	54	23
20.....	43	35	38	75	52	72	97	83	96	42	31	58	20.....	33	44	58	48	72	75	88	77	66	67	64	34
21.....	50	36	44	76	60	88	93	84	97	51	30	52	21.....	33	41	61	62	63	71	85	84	71	63	59	29
22.....	24	29	44	64	70	90	88	89	96	60	39	47	22.....	35	41	60	76	71	81	88	84	81	55	44	23
23.....	18	31	60	65	77	91	80	93	83	49	34	46	23.....	13	35	43	77	67	85	84	72	76	62	32	21
24.....	18	43	63	82	82	92	84	84	73	57	37	50	24.....	12	35	37	81	60	87	89	75	81	67	36	18
25.....	25	47	54	85	78	97	89	89	77	60	36	58	25.....	—2	31	38	67	64	85	93	78	88	68	45	34
26.....	36	45	38	66	69	84	89	77	78	71	55	40	26.....	5	24	43	63	67	75	88	83	92	64	58	30
27.....	12	43	67	62	63	90	82	87	68	66	35	31	27.....	8	18	44	60	78	78	82	87	69	74	38	31
28.....	7	61	55	69	88	86	84	95	72	40	47	38	28.....	12	29	50	79	60	85	85	91	75	42	32	
29.....	20	.....	60	83	95	81	87	72	52	40	38	29.....	19	.....	64	66	69	90	88	92	80	55	35	37	
30.....	14	.....	41	82	96	77	79	82	55	44	35	28.....	31	.....	64	56	61	91	79	91	65	25	38		
31.....	23	.....	42	.....	96	78	76	43	.....	19	.....	31	.....	54	.....	64	.....	91	81	61	.....	33			
1896																									
1.....	27	46	29	57	81	69	92	80	73	58	64	21	1.....	19	14	30	48	83	82	95	86	96	73	53	35
2.....	35	37	34	35	76	69	91	82	80	61	69	26	2.....	19	20	36	44	76	86	97	86	96	84	58	40
3.....	24	33	34	38	78	77	91	86	74	64	70	32	3.....	35	14	43	45	62	84	93	79	96	89	61	43
4.....	3	34	34	38	82	87	90	89	71	65	63	36	4.....	37	34	40	42	48	83	83	80	92	74	69	34
5.....	17	41	37	57	77	92	81	93	73	69	60	48	5.....	41	36	38	38	45	86	81	84	85	74	62	33
6.....	19	41	50	49	77	92	84	97	67	54	52	47	6.....	37	35	47	38	54	91	88	85	84	64	43	31
7.....	36	33	38	45	79	90	80	88	74	49	46	48	7.....	35	46	56	55	69	92	94	87	69	68	51	27
8.....	28	34	36	50	90	76	81	95	78	53	34	38	8.....	42	51	62	61	72	84	96	77	76	69	54	19
9.....	36	31	39	48	91	73	67	97	83	57	32	49	9.....	34	48	66	54	75	87	78	81	73	45	27	
10.....	38	39	36	53	92	76	84	94	90	68	47	53	10.....	37	61	57	60	62	88	77	84	66	78	33	
11.....	37	32	26	81	90	82	89	91	89	58	50	51	11.....	38	58	53	70	73	91	77	85	85	73	69	30
12.....	37	26	24	85	87	82	89	83	86	61	46	59	12.....	64	44	53	72	65	85	84	82	78	64	45	27
13.....	22	31	26	78	83	81	93	82	71	58	33	47	13.....	34	42	59	69	70	78	84	82	77	60	44	24
14.....	26	31	32	74	80	82	88	86	76	70	44	38	14.....	35	39	53	67	75	84	84	81	84	71	45	15
15.....	26	45	37	82	76	74	87	89	68	76	60	31	15.....	33	33	50	70	67	68	101	82	83	57	41	27
16.....	35	21	36	89	80	78	75	85	72	47	69	36	16.....	34	31	71	74	72	72	99	83	69	69	46	38
17.....	42	19	41	88	77	81	76	78	74	40	70	35	17.....	34	41	56	80	68	81	95	86	82	67	48	37
18.....	36	29	40	85	76	84	80	78	70	44	67	36	18.....	42	43	61	51	70	87	89	77	84	54	55	35
19.....	34	20	33	74	65	89	72	74	61	50	43	35	19.....	37	31	70	59	71	77	88	82	81	45	48	32
20.....	35	15	34	66	68	87	79	76	65	51	32	20.....	44	33	52	50	79	82	90	81	74	69	51	41	
21.....	31	19	43	67	70	86	86	84	67	46	41	30	21.....	36	31	59	63	81	74	87	88	81	57	68	39
22.....	31	37	41	61	80	83	82	82	56	55	41	30	22.....	36	30	60	59	76	82	89	93	71	47	62	45
23.....	31	37	32	61	72	72	74	74	62	54	52	29	23.....	41	34	63	57	78	80	93	95	68	53	23	40
24.....	37	39	32	61	72	79	87	76	57	77	34	39	24.....</												

## SUPPLEMENT NO. 2.

TABLE 7.—*Daily maximum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.		
1899														1901													
1.....	23	19	39	31	85	77	92	88	84	57	55	52	1.....	22	22	40	54	80	67	97	85	71	82	61	63	63	
2.....	34	32	47	33	87	78	94	91	91	63	41	45	2.....	27	34	40	40	86	68	97	88	80	67	63	64	53	
3.....	43	27	50	41	71	83	96	84	91	77	36	42	3.....	19	31	53	43	65	74	94	86	87	59	64	64	31	
4.....	53	26	37	45	67	91	97	88	83	73	47	33	4.....	37	31	41	61	76	81	97	83	91	58	40	40	28	
5.....	38	24	36	46	72	94	86	76	92	70	46	22	5.....	33	24	16	57	83	86	90	82	91	64	39	39	31	
6.....	28	19	25	46	73	96	83	84	84	69	52	36	6.....	37	21	20	42	75	74	85	84	93	68	49	49	34	
7.....	20	17	30	40	71	93	84	83	94	66	53	40	7.....	36	27	40	50	75	61	72	92	96	74	48	48	35	
8.....	38	9	29	44	69	82	76	83	73	59	55	49	8.....	52	25	41	50	68	71	82	73	78	50	45	45	45	
9.....	32	-2	45	50	78	83	85	87	78	68	60	45	9.....	51	29	42	61	72	75	84	97	74	71	51	42	42	
10.....	20	2	45	60	75	73	83	90	70	81	55	55	10.....	45	28	53	58	72	81	96	88	79	78	49	31	31	
11.....	22	8	66	71	73	85	92	96	78	65	45	60	11.....	34	28	41	61	65	89	87	85	69	81	60	38	38	
12.....	36	7	58	75	79	88	94	93	81	79	43	56	12.....	35	27	42	60	56	98	82	87	82	71	57	39	39	
13.....	44	16	31	81	66	92	75	83	71	84	51	33	13.....	36	26	47	56	65	83	84	92	78	59	52	57	57	
14.....	41	21	32	69	66	90	79	79	69	89	47	28	14.....	36	30	35	61	67	86	88	97	78	55	43	38	38	
15.....	41	42	52	58	64	78	74	84	78	87	49	27	15.....	47	36	33	63	72	73	93	92	76	61	36	13	13	
16.....	48	49	39	55	85	79	86	88	93	82	56	26	16.....	49	29	38	68	77	78	97	87	75	52	36	6	6	
17.....	37	53	49	71	78	82	82	93	92	69	61	39	17.....	30	30	54	63	83	90	80	66	51	39	16	16	16	
18.....	30	39	50	75	65	81	83	96	71	64	62	46	18.....	23	37	70	50	77	86	95	86	62	57	42	11	11	
19.....	32	46	33	69	61	92	87	97	59	54	56	50	19.....	22	27	53	46	64	85	90	87	65	72	39	12	12	
20.....	35	53	33	80	65	90	93	65	55	57	40	20.....	52	22	58	47	62	82	96	85	66	64	44	44	40		
21.....	41	45	36	85	65	82	93	89	70	59	54	48	21.....	47	24	29	40	62	83	101	85	71	71	45	11	11	
22.....	38	40	50	77	64	98	89	93	69	74	53	48	22.....	39	17	47	54	70	90	99	87	79	79	45	33	33	
23.....	50	33	32	65	68	93	88	91	67	82	44	36	23.....	38	19	60	59	80	87	93	84	84	82	40	36	36	
24.....	37	33	38	79	77	76	96	95	76	79	44	33	24.....	38	25	63	65	73	95	97	84	89	58	35	40	40	
25.....	36	39	41	75	81	85	78	92	63	80	41	17	25.....	29	32	72	68	52	94	90	85	72	59	39	39	39	
26.....	41	62	39	84	80	84	90	82	57	77	52	19	26.....	27	26	51	75	53	91	91	84	88	67	36	34	34	
27.....	17	34	41	85	77	90	87	88	64	62	41	24	27.....	33	25	40	74	59	94	99	85	84	57	35	35	35	
28.....	24	44	32	86	79	85	83	83	68	59	42	22	28.....	29	32	45	81	54	90	96	88	77	61	36	34	34	
29.....	14.....	36	91	78	77	86	89	54	55	48	19	29.....	24.....	44	84	62	89	89	91	82	70	43	33	33	33		
30.....	13.....	31	90	81	83	81	93	51	61	61	54	14.....	33.....	36	86	65	93	92	83	83	75	78	45	33	33		
31.....	12.....	39.....	81.....	84.....	92.....	60.....	60.....	60.....	60.....	60.....	60.....	13.....	31.....	23.....	52.....	75.....	75.....	75.....	75.....	75.....	75.....	75.....	75.....	75.....	75.....	39.....	
1900														1902													
1.....	18	11	36	55	71	77	82	82	94	74	64	38	1.....	31	32	42	36	64	87	76	87	86	67	73	50	50	
2.....	24	22	36	46	81	72	84	84	90	85	62	38	2.....	43	29	35	36	79	89	82	90	80	61	76	44	44	
3.....	33	34	36	57	56	69	87	86	86	92	63	58	3.....	25	11	36	50	78	77	90	90	85	63	63	49	49	
4.....	36	33	37	46	55	75	92	92	87	90	67	39	4.....	29	12	36	51	88	78	93	84	71	60	68	34	34	
5.....	40	31	19	62	64	82	91	99	93	92	59	38	5.....	34	8	42	59	63	74	93	85	75	59	59	33	33	
6.....	38	38	48	70	79	80	88	97	96	89	53	41	6.....	43	25	47	52	85	85	94	76	80	71	59	38	38	
7.....	47	49	35	79	81	85	91	96	81	70	50	38	7.....	42	25	48	44	64	84	94	76	82	66	51	33	33	
8.....	36	64	45	57	76	79	73	96	88	61	40	35	8.....	46	21	43	52	76	69	94	82	88	73	61	21	21	
9.....	45	25	50	44	58	74	75	96	88	64	40	37	9.....	46	18	43	61	57	76	91	85	69	59	67	21	21	
10.....	44	42	42	46	66	82	80	98	96	67	38	29	10.....	39	31	61	66	46	80	79	83	74	69	54	36	36	
11.....	31	47	32	38	78	81	85	96	95	69	38	27	11.....	31	23	61	58	84	82	76	72	65	26	34	34	34	
12.....	32	45	32	35	86	74	78	85	81	65	40	37	12.....	24	28	68	48	79	89	84	80	52	74	25	25	25	
13.....	33	41	40	38	88	85	82	88	85	73	43	36	13.....	26	29	48	46	58	83	89	69	59	62	74	23	23	
14.....	36	25	30	57	91	81	88	87	83	75	27	25	14.....	37	30	51	45	63	90	93	78	68	49	72	41	41	
15.....	40	28	29	65	91	73	91	86	90	78	34	29	15.....	41	25	52	55	65	93	83	75	69	64	59	59	59	
16.....	35	22	23	67	90	77	87	86	72	57	35	30	16.....	31	27	53	59	70	75	84	76	72	59	49	43	43	
17.....	35	22	15	60	87	80	88	88	59	60	41	36	17.....	40	28	25	63	79	79	95	81	82	59	46	47	47	
18.....	51	21	45	63	64	80	82	74	71	57	42	18.....	42	28	24	68	87	80	78	87	66	70	50	44	44		
19.....	47	30	47	71	67	79	86	97	73	61	61	48	19.....	31	28	38	66	92	80	84	87	60	74	57	42	42	
20.....	46	30	31	70	74	83	89	93	79	70	63	33	20.....	42	29	50	67	89	70	84	88	74	66	61	46	46	
21.....	43	36	31	60	75	84	80	83	71	73	62	48	21.....	31	38	52	81	81	65	72	82	83	50	58	46	46	
22.....	49	34	50</																								

SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 7.—*Daily maximum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903																									
1.....	41	41	28	60	51	58	95	76	74	78	71	30	1.....	56	23	31	52	54	79	87	79	75	75	37	33
2.....	34	54	44	76	67	73	95	86	86	66	65	23	2.....	43	18	38	52	81	73	86	81	79	69	41	36
3.....	36	33	42	45	49	78	93	91	88	83	70	31	3.....	19	18	37	64	84	75	83	86	71	81	45	30
4.....	33	36	43	36	64	82	97	80	88	74	71	32	4.....	25	17	39	51	88	82	85	84	66	79	51	31
5.....	31	33	49	49	72	77	85	88	69	77	53	25	5.....	31	16	37	51	76	88	86	86	72	77	52	32
6.....	26	36	47	64	76	77	88	84	72	75	40	30	6.....	29	21	34	46	76	87	87	78	67	53	42	
7.....	36	33	65	64	66	77	90	73	77	77	42	33	7.....	27	20	38	40	65	63	81	89	79	76	40	48
8.....	26	32	46	66	68	87	96	84	92	57	55	32	8.....	22	34	37	53	74	75	80	87	81	85	37	52
9.....	20	37	40	69	83	77	97	82	92	62	65	34	9.....	30	34	45	72	57	74	76	93	82	83	38	45
10.....	18	49	45	56	82	78	94	85	80	62	54	30	10.....	16	24	35	69	57	69	73	92	67	69	44	38
11.....	22	42	48	64	83	58	88	75	81	60	59	22	11.....	33	20	35	50	63	76	81	91	80	54	55	43
12.....	7	41	46	58	86	65	83	75	93	67	50	40	12.....	41	32	34	58	67	75	87	94	84	51	60	45
13.....	15	36	63	50	85	70	80	76	85	67	44	24	13.....	26	14	36	61	73	80	84	88	74	50	58	
14.....	29	33	67	50	83	75	74	78	92	71	47	14	14.....	19	16	26	46	83	86	88	77	70	73	36	30
15.....	34	29	55	47	78	79	78	76	93	72	51	15	15.....	18	8	38	41	73	88	84	72	85	70	50	33
16.....	46	21	50	56	85	81	84	82	73	62	64	24	16.....	24	22	63	39	70	81	92	75	82	63	41	36
17.....	36	9	70	62	93	73	86	85	62	54	44	27	17.....	32	27	60	45	59	91	94	78	76	72	59	34
18.....	22	8	80	65	90	81	72	89	63	54	24	30	18.....	37	26	68	47	58	90	92	85	88	68	47	35
19.....	25	16	79	61	86	80	83	88	71	65	30	36	19.....	39	35	57	63	66	89	90	75	87	65	43	36
20.....	42	27	73	63	87	68	79	83	80	68	33	36	20.....	36	36	32	57	66	83	86	84	73	65	41	39
21.....	34	32	46	57	87	79	85	87	83	65	38	39	21.....	34	35	34	54	73	81	77	89	82	48	42	42
22.....	37	31	54	43	80	66	78	91	86	65	44	33	22.....	25	35	53	57	71	78	82	86	51	49	35	
23.....	33	39	56	59	83	70	86	87	84	64	41	23.....	22	33	68	64	70	70	81	90	73	60	55	31	
24.....	21	36	38	47	84	72	91	96	63	48	34	39	24.....	23	37	62	68	76	82	71	87	79	51	62	30
25.....	28	41	48	55	80	80	94	93	74	59	28	32	25.....	17	36	70	66	78	89	77	76	68	43	47	31
26.....	48	49	62	63	87	82	85	83	87	46	23	12	26.....	21	33	56	60	68	73	80	80	70	60	50	48
27.....	43	46	62	70	85	79	81	66	63	54	30	31	27.....	27	38	73	70	73	74	85	81	84	50	42	49
28.....	43	45	47	78	78	83	92	71	66	60	25	21	28.....	22	38	81	77	80	75	83	86	92	47	67	45
29.....	59	45	82	67	91	89	81	76	68	63	30	26	29.....	19	66	81	79	84	87	89	87	85	63	42	
30.....	37	52	72	57	92	79	70	79	67	67	30	15	30.....	21	55	64	87	79	87	85	87	85	49	25	36
31.....	39	68	68	65	65	71	72	68	69	69	25	31.....	29	51	71	71	85	80	85	80	43	43	35		
1904																									
1.....	26	19	34	57	64	61	67	85	86	70	68	35	1.....	36	31	53	40	78	80	84	84	79	65	41	40
2.....	15	27	54	38	66	70	75	77	89	58	65	29	2.....	43	16	45	51	78	76	86	88	81	70	51	35
3.....	13	18	54	38	74	86	81	77	77	59	60	27	3.....	52	33	49	59	66	84	92	79	70	46	37	
4.....	17	10	32	49	74	84	87	88	77	67	66	33	4.....	41	36	33	68	79	89	83	93	77	73	48	
5.....	21	39	47	59	79	82	83	85	77	61	51	34	5.....	34	15	33	57	63	84	94	82	71	51	37	
6.....	30	48	44	48	81	77	78	81	78	53	46	36	6.....	33	12	32	42	59	90	78	89	85	54	55	53
7.....	33	50	43	61	84	73	75	85	85	73	71	58	7.....	35	18	37	49	50	89	85	82	90	59	51	23
8.....	37	16	42	57	77	64	85	73	71	65	45	36	8.....	23	28	35	69	60	87	84	80	90	51	33	
9.....	29	13	41	46	62	68	82	87	77	79	44	25	9.....	32	32	43	54	49	85	86	91	53	51	33	
10.....	21	15	49	39	58	69	83	83	77	79	37	25	10.....	42	22	35	57	59	78	87	85	91	43	44	
11.....	21	18	44	51	63	75	86	79	90	63	44	24	11.....	40	32	31	48	74	68	83	85	92	44	38	
12.....	26	18	30	39	80	82	78	82	65	53	45	26	12.....	43	28	61	84	66	86	78	93	52	35	47	
13.....	26	27	34	39	75	85	82	90	76	50	38	20	13.....	36	49	28	70	78	68	91	80	77	71	33	
14.....	25	35	31	47	55	79	85	82	64	61	41	25	14.....	38	44	25	84	62	77	91	83	68	76	39	
15.....	25	16	35	55	49	82	87	90	66	61	50	26	15.....	51	22	25	64	87	83	84	76	73	40	54	
16.....	32	7	32	39	62	72	92	86	73	69	56	27	16.....	37	30	28	45	89	76	78	86	83	77	45	
17.....	23	15	3	51	63	79	96	85	84	76	58	31	17.....	33	41	29	53	90	77	83	87	90	77	50	
18.....	19	13	36	56	51	85	93	79	74	78	60	32	18.....	39	35	35	67	86	73	83	85	90	69	52	
19.....	39	21	41	35	54	76	89	71	80	79	65	31	19.....	34	49	28	74	68	82	89	92	86	65	38	
20.....	39	26	35	45	70	84	86	78	67	61	57	34	20.....	67	57	31	75	66	78	88	91	83	62	31	
21.....	34	36	41	50	80	80	83	86	50	57	50	32	21.....	68	51	38	71	77	92	93	89	81	65	31	
22.....	34	33	66	67	82	73	81	76	59	48	57	42	22.....	63	47	23	61	91	75	95	92	82	59	28	
23.....	29	38	52	78	79	84	75	79	73	49	57	53	23.....	55	63	24	61	84	78	93	72	58	45	20	
24.....	12	33	63	71	79	88	78	84	70	60	45	39	24.....	31	56	29	61	90	81	80	82	72	66	43	
25.....	7	16	64	47	91	90	82																		

## SUPPLEMENT NO. 2.

TABLE 7.—*Daily maximum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1907														1909												
1.....	34	34	47	37	51	54	83	83	84	67	53	30	1.....	26	23	52	45	43	80	85	86	68	62	64	54	
2.....	40	37	47	48	58	55	68	72	77	53	53	29	2.....	34	37	41	51	45	76	86	84	76	66	59	48	
3.....	51	14	32	67	64	70	79	68	78	73	45	30	3.....	48	38	37	45	51	77	72	89	65	68	55	46	
4.....	39	15	39	58	51	61	81	76	77	68	49	29	4.....	51	51	32	54	58	76	73	86	68	66	58	57	
5.....	47	19	33	38	57	67	81	74	72	65	55	31	5.....	49	53	40	76	79	81	76	86	70	65	56	60	
6.....	55	23	32	41	59	68	88	86	76	70	41	43	6.....	34	53	49	63	81	79	79	85	72	73	59	34	
7.....	60	27	33	56	60	60	85	88	72	71	46	51	7.....	15	43	47	48	63	70	81	90	78	79	57	29	
8.....	59	28	36	43	60	71	87	75	78	58	54	58	8.....	27	38	36	41	69	66	83	92	81	80	58	20	
9.....	33	35	36	37	73	76	87	84	76	63	53	53	9.....	34	43	55	38	65	72	89	87	73	82	54	9	
10.....	31	34	39	40	55	74	85	87	71	60	41	48	10.....	41	34	55	37	53	70	89	82	79	68	64	17	
11.....	33	24	45	42	52	79	81	91	71	52	40	29	11.....	34	30	36	53	60	75	82	81	78	54	72	25	
12.....	38	23	49	38	71	70	79	87	78	46	43	33	12.....	17	44	34	66	69	75	91	79	84	41	60	34	
13.....	36	55	43	41	82	59	85	84	83	40	39	32	13.....	24	41	44	42	74	81	84	87	92	46	74	43	
14.....	42	41	34	39	84	81	86	82	86	57	36	35	14.....	35	27	38	49	77	66	86	90	49	75	33	33	
15.....	31	44	50	47	64	81	81	88	90	48	44	36	15.....	32	22	37	57	81	71	84	86	75	42	62	29	
16.....	27	43	59	43	56	84	89	87	87	66	40	32	16.....	21	21	32	73	69	81	79	87	50	63	28	28	
17.....	28	40	54	41	75	90	89	87	79	73	48	33	17.....	30	29	30	72	69	75	79	77	81	55	40	32	
18.....	37	51	44	46	78	89	87	82	74	55	51	32	18.....	26	42	38	79	64	69	75	79	74	48	34	16	
19.....	64	46	58	49	68	83	90	88	89	59	41	26	19.....	33	39	45	51	68	79	77	84	82	50	50	20	
20.....	51	39	45	49	55	85	87	78	85	44	50	38	20.....	35	35	38	51	69	86	83	77	87	59	59	20	
21.....	17	24	65	57	59	89	86	73	69	57	52	33	21.....	47	43	40	67	68	86	87	76	77	67	57	19	
22.....	20	20	79	65	53	91	83	79	66	54	44	30	22.....	54	46	44	52	69	86	85	80	81	55	59	27	
23.....	16	27	74	54	56	89	85	84	75	66	41	34	23.....	64	43	50	48	72	89	74	87	70	44	35	29	
24.....	17	35	67	60	60	81	88	82	71	57	46	37	24.....	62	48	51	60	67	87	79	91	70	41	40	23	
25.....	25	30	66	52	65	86	90	80	55	59	51	37	25.....	46	27	33	67	69	85	84	92	64	52	39	30	
26.....	18	34	81	50	76	76	76	80	62	45	43	45	26.....	45	47	48	60	76	87	82	87	60	66	53	29	
27.....	22	27	71	62	46	77	79	74	56	45	51	57	27.....	42	39	45	57	75	88	82	91	61	61	62	24	
28.....	26	32	66	73	65	80	83	76	64	43	45	53	28.....	36	30	38	45	69	87	92	92	60	45	65	21	
29.....	26	69	78	71	81	85	79	75	55	56	35	34	29.....	36	37	58	82	83	89	76	55	47	45	15	15	
30.....	21	54	41	68	86	83	85	66	66	46	36	42	30.....	26	42	63	79	87	86	75	61	71	48	11	26	
31.....	25	43	.....	62	.....	82	84	.....	50	.....	35	31.....	14	42	.....	81	.....	82	82	77	.....	.....	.....	26		
1908														1910												
1.....	39	35	35	48	49	74	83	86	85	54	45	50	1.....	38	36	49	68	75	51	97	85	68	74	64	32	
2.....	37	12	35	31	45	78	81	92	70	57	55	25	2.....	37	44	45	65	65	56	95	84	81	69	.....	31	
3.....	34	26	33	38	57	78	81	96	75	68	63	33	3.....	26	42	50	69	53	60	87	90	85	87	.....	29	
4.....	38	21	34	52	57	80	83	94	88	74	53	35	4.....	15	38	56	74	57	64	77	79	80	72	47	30	
5.....	30	39	36	49	51	86	87	87	87	82	41	33	5.....	35	29	65	70	58	65	88	77	71	37	24		
6.....	40	32	62	65	58	85	93	87	84	83	58	35	6.....	17	17	67	47	63	68	87	83	82	64	33	26	
7.....	42	26	39	56	62	90	81	77	74	72	50	33	7.....	14	33	43	51	61	72	89	75	84	60	41	25	
8.....	34	18	39	63	56	89	76	77	80	60	52	24	8.....	27	42	42	66	62	78	93	85	82	69	46	27	
9.....	28	26	38	53	66	75	81	81	92	62	54	28	9.....	24	37	42	63	69	72	97	80	66	59	64	27	
10.....	39	40	51	57	71	75	88	82	94	55	46	35	10.....	26	28	43	69	70	66	90	84	71	66	58	27	
11.....	36	49	55	49	74	72	94	87	95	53	45	38	11.....	27	29	46	80	58	62	89	82	80	74	35	29	
12.....	36	46	60	57	80	78	95	92	89	58	38	35	12.....	32	25	54	52	58	75	86	85	82	62	38	29	
13.....	30	47	50	66	64	91	93	84	84	69	41	37	13.....	30	24	53	64	48	82	83	90	71	69	39	35	
14.....	30	36	57	77	59	72	83	88	76	80	31	44	14.....	28	34	34	77	54	84	87	92	69	80	35	35	
15.....	37	33	52	60	81	66	80	70	75	83	30	50	15.....	28	48	41	75	63	87	91	94	75	75	39	35	
16.....	35	29	39	42	83	71	86	94	82	80	35	38	16.....	28	46	53	67	71	88	90	88	77	78	35	24	
17.....	29	29	51	64	85	77	86	85	83	82	45	35	17.....	38	18	41	54	64	89	79	97	82	82	31	32	
18.....	35	27	37	58	77	93	82	81	89	85	52	41	18.....	43	18	66	52	70	92	79	73	77	85	32	40	
19.....	43	34	34	65	69	91	79	75	93	64	70	36	19.....	39	27	68	45	79	92	84	79	70	81	42	33	
20.....	43	30	37	60	77	91	76	72	84	67	50	34	20.....	41	43	64	43	73	93	88	79	77	62	43	23	
21.....	48	31	49	58	77	87	82	81	92	72	56	39	21.....	36	36	59	50	82	91	91	89	77	64	39	27	
22.....	41	28	53	77	85	92	88	80	94	68	68	36	22.....	30	30	72	63	82	89	91	83	73	51	44	34	
23.....	31	32	50	79	80	94	87	75	88	67	62	38	23.....	38	24	63	39	73	96	91	82	62	62	47	34	
24.....	27	31	50	76	80	78	83																			

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 7.—*Daily maximum temperatures (°F.), Wauseon, Ohio, 1883–1912—Concluded.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1911																									
1.....	39	38	40	33	71	79	94	85	89	58	47	36	1.....	28	30	20	38	60	84	79	75	93	65	44	56
2.....	44	43	39	39	47	79	98	85	93	57	36	24	2.....	26	20	21	35	73	69	87	71	93	71	37	56
3.....	18	34	38	36	55	77	99	80	90	69	43	29	3.....	23	10	18	43	73	83	85	67	83	66	44	39
4.....	16	36	37	59	60	79	99	90	.....	70	45	29	4.....	16	3	23	64	76	74	88	72	86	77	53	50
5.....	17	28	39	42	65	85	99	95	80	57	52	38	5.....	5	16	22	71	77	90	78	94	80	60	58	58
6.....	32	28	38	66	72	79	93	93	70	80	59	45	6.....	4	24	30	74	81	71	88	79	93	84	55	58
7.....	41	23	30	45	78	71	87	94	79	65	49	46	7.....	5	24	37	40	82	64	88	78	83	66	55	35
8.....	41	35	43	40	81	76	96	88	.....	63	50	50	8.....	20	16	35	54	72	74	90	77	62	54	35	35
9.....	28	36	58	50	82	87	95	93	82	60	53	52	9.....	6	14	27	68	65	76	92	80	85	74	49	29
10.....	45	24	52	58	89	96	89	95	83	64	63	59	10.....	12	7	30	59	76	79	88	77	95	63	62	41
11.....	52	41	58	64	84	88	92	81	85	56	68	58	11.....	10	19	30	74	75	86	86	75	79	81	70	36
12.....	34	36	56	56	81	76	85	77	69	66	67	39	12.....	9	18	32	69	65	81	89	82	75	71	66	15
13.....	36	40	44	59	68	67	84	82	68	64	24	40	13.....	12	24	35	46	58	72	86	85	80	63	59	38
14.....	37	50	55	55	73	77	87	90	72	60	30	34	14.....	10	35	40	74	60	84	91	83	82	65	37	43
15.....	33	41	41	50	89	81	88	84	81	73	37	34	15.....	16	37	33	78	63	86	94	80	80	60	40	43
16.....	21	51	27	52	90	72	81	90	84	78	33	39	16.....	19	31	36	63	57	78	70	72	72	66	50	40
17.....	22	59	47	55	91	68	75	79	86	65	50	33	17.....	35	38	49	41	65	74	87	81	72	72	45	51
18.....	35	38	41	64	94	81	83	79	85	73	37	37	18.....	39	48	45	41	73	64	86	87	73	65	50	37
19.....	28	28	52	53	95	86	81	75	73	76	33	38	19.....	22	41	49	52	66	72	73	84	65	62	57	30
20.....	39	26	55	60	92	90	81	77	72	63	34	37	20.....	21	36	38	56	83	78	76	87	77	64	62	35
21.....	40	23	67	55	88	87	84	83	66	50	38	42	21.....	26	27	28	70	83	72	80	83	82	76	59	27
22.....	27	33	55	50	89	94	82	87	73	49	39	45	22.....	35	23	29	59	86	77	82	83	60	67	52	32
23.....	37	43	38	53	84	97	80	69	81	48	39	38	23.....	36	37	36	59	89	80	81	72	71	48	52	33
24.....	45	47	42	61	81	86	72	57	83	59	32	43	24.....	23	43	33	62	77	84	91	86	75	54	34	36
25.....	47	53	63	63	93	82	72	73	76	66	37	37	25.....	22	41	33	67	76	86	88	92	82	62	34	41
26.....	49	48	55	70	95	88	75	79	68	59	46	39	26.....	23	44	43	67	83	90	76	91	58	59	36	42
27.....	53	37	53	71	97	82	81	84	73	45	49	42	27.....	21	25	40	59	86	80	84	71	64	63	36	33
28.....	42	29	31	70	96	75	88	73	70	48	45	25	28.....	23	29	37	45	72	88	82	69	64	71	35	37
29.....	49	37	72	77	78	79	70	67	53	33	33	29.....	28	23	43	44	62	92	76	67	56	71	42	37	
30.....	41	34	73	73	85	87	70	61	46	31	34	30.....	26	.....	43	61	72	73	80	74	61	56	50	36	
31.....	31	37	.....	75	.....	91	79	47	.....	41	31.....	27	.....	62	.....	79	.....	71	90	.....	46	.....	39		

## SUPPLEMENT NO. 2.

TABLE 8.—*Daily minimum temperatures (°F.), Wauseon, Ohio, 1883–1912.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1883																									
1.....	16	- 4	32	24	40	34	48	52	51	29	31	29	1.....	5	5	27	29	39	52	46	64	44	56	33	25
2.....	2	5	30	18	34	42	68	58	63	39	26	14	2.....	2	- 6	20	31	39	46	51	61	32	55	35	32
3.....	8	13	16	22	45	62	71	47	45	33	29	9	3.....	4	21	26	25	21	59	48	60	46	43	31	28
4.....	6	12	14	34	44	55	69	44	40	29	34	20	4.....	12	28	31	12	34	60	51	56	45	38	27	28
5.....	14	2	7	44	44	55	66	44	40	43	46	26	5.....	22	- 3	20	34	45	60	64	50	44	36	44	14
6.....	17	- 2	25	31	33	65	66	46	36	46	36	25	6.....	30	- 14	16	27	52	50	64	51	34	36	52	5
7.....	21	12	12	30	54	61	59	44	48	43	21	40	7.....	27	9	22	38	40	66	64	61	45	30	40	7
8.....	0	0	3	25	50	51	56	43	36	38	33	30	8.....	25	14	0	27	34	49	70	55	54	33	37	6
9.....	-16	7	19	30	46	60	43	47	30	55	45	24	9.....	24	10	6	21	35	38	68	66	52	27	37	24
10.....	-10	-12	23	39	50	59	48	54	30	53	40	25	10.....	15	-19	16	18	32	43	53	63	49	31	32	16
11.....	- 4	16	16	42	32	54	64	53	35	48	26	19	11.....	24	-24	7	33	27	44	53	54	50	32	31	12
12.....	- 6	0	19	42	36	61	65	52	41	53	24	21	12.....	13	- 6	18	30	41	56	54	51	48	55	4	4
13.....	13	4	27	39	27	52	64	59	45	48	26	34	13.....	6	-24	9	25	36	65	66	66	64	51	32	23
14.....	- 1	23	27	44	42	42	64	47	52	40	11	17	14.....	2	-17	17	18	39	62	57	52	56	46	26	14
15.....	- 8	34	22	48	42	46	62	54	52	32	11	12	15.....	19	5	17	32	41	68	62	45	50	41	26	7
16.....	9	37	13	41	38	61	54	50	55	28	6	11	16.....	14	-11	4	35	47	55	61	41	43	36	29	22
17.....	22	16	27	37	35	66	60	55	50	27	18	- 5	17.....	-10	-15	-2	34	49	43	64	44	36	36	25	27
18.....	15	12	14	45	52	68	51	66	42	47	35	14	18.....	-18	-9	6	37	52	44	54	59	56	35	47	18
19.....	22	20	7	42	62	58	47	69	49	46	28	6	19.....	-25	-7	0	41	42	48	56	56	46	46	34	24
20.....	20	24	-17	35	52	55	50	57	33	36	3	20.....	-23	-13	-7	45	43	56	69	43	50	38	33	15	
21.....	-10	19	- 5	37	32	52	61	56	57	31	56	- 1	21.....	-13	-14	-6	54	52	57	71	61	43	30	28	20
22.....	-18	26	- 8	36	33	53	70	65	56	29	42	2	22.....	-29	-17	-2	54	61	41	57	57	45	33	29	37
23.....	-13	17	15	30	36	56	67	54	55	26	40	8	23.....	-14	0	2	55	60	39	67	60	31	31	28	39
24.....	- 7	19	- 1	21	35	65	60	41	48	37	35	22	24.....	16	4	20	47	56	43	70	59	40	24	31	28
25.....	2	24	17	25	56	60	53	45	42	42	32	19	25.....	10	16	13	37	57	53	69	51	42	26	23	21
26.....	- 2	14	28	34	49	54	56	54	29	37	29	18	26.....	-11	23	28	40	49	59	59	44	48	32	21	14
27.....	27	10	26	36	38	57	66	47	40	27	12	16	27.....	-13	26	32	38	52	62	58	41	47	44	26	32
28.....	21	23	26	34	48	60	56	56	37	43	23	10	28.....	-27	24	25	38	48	61	58	40	52	46	16	32
29.....	18	26	20	47	58	50	52	40	49	22	9	29.....	-26	24	27	56	54	69	44	57	39	23	33	33	
30.....	31	28	25	46	56	44	44	39	42	29	34	30.....	8	27	43	58	58	40	67	54	58	23	35	35	
31.....	8	22	22	46	46	48	62	52	36	27	27.....	- 2	31	31	59	59	65	43	43	14	31	31	33		
1884																									
1.....	17	0	1	35	41	50	64	50	42	57	33	2	1.....	32	8	5	28	43	46	51	67	36	34	34	6
2.....	8	25	- 4	31	41	56	55	57	49	54	27	4	2.....	31	- 4	6	23	38	61	52	45	29	43	- 4	
3.....	3	21	6	26	32	54	59	64	59	56	21	23	3.....	37	-10	9	19	38	46	50	43	51	30	45	4
4.....	-19	21	- 8	29	48	64	64	53	65	61	35	28	4.....	31	-12	17	24	56	36	55	46	54	42	29	1
5.....	-24	28	5	25	57	58	60	49	60	65	28	34	5.....	17	-18	16	20	50	44	57	60	64	45	40	- 1
6.....	-25	31	5	22	54	58	52	44	65	55	19	42	6.....	9	13	16	26	38	47	58	58	58	42	25	2
7.....	-19	24	19	23	48	58	49	52	63	50	27	32	7.....	3	23	19	26	45	58	68	48	56	39	22	8
8.....	- 5	23	15	28	51	58	48	42	65	39	22	31	8.....	10	22	26	14	34	45	58	50	58	43	24	18
9.....	7	25	18	30	45	52	45	40	67	30	21	18	9.....	11	30	21	22	51	51	48	53	64	49	27	13
10.....	2	21	- 2	30	38	50	59	42	64	30	42	12	10.....	- 8	36	24	36	62	57	62	58	58	46	36	31
11.....	4	21	27	28	42	53	49	42	58	37	34	24	11.....	-13	40	20	37	49	46	55	67	42	46	30	26
12.....	6	28	27	28	40	54	64	56	46	55	31	22	12.....	- 4	36	33	27	52	46	56	60	54	48	27	30
13.....	10	30	27	38	46	54	56	56	46	45	27	15	13.....	2	33	27	40	52	54	66	37	46	21	28	28
14.....	18	0	24	40	37	50	44	56	38	32	21	21	14.....	4	31	24	44	61	68	63	55	52	22	22	7
15.....	4	6	18	47	49	50	52	54	44	25	15	15.....	13	20	27	47	44	62	58	50	49	44	25	7	
16.....	2	13	18	34	32	52	48	56	56	47	24	12	16.....	22	8	26	47	37	71	47	62	64	31	21	- 2
17.....	12	30	40	31	35	57	47	58	46	37	24	- 3	17.....	9	6	24	50	32	62	52	64	48	40	38	24
18.....	20	33	30	26	48	65	50	58	42	33	22	- 17	18.....	14	28	30	48	38	41	48	57	46	39	45	20
19.....	6	32	32	40	51	63	54	60	35	35	16	- 32	19.....	6	15	34	45	43	42	47	46	50	50	41	18
20.....	-13	14	31	35	46	65	47	64	43	46	16	-14	20.....	7	9	51	47	47	52	50	49	38	55	30	0
21.....	-11	17	32	31	46	64	45	63	30	55	22	11	21.....	17	18	32	43	40	63	56	68	36	38	22	8
22.....	7	13	29	33	56	62	49	51	49	39	26	- 3	22.....	- 2	16	28	45	64	59	54	66	48	38	28	4
23.....	6	12	42	35	63	64	69	48	55	22	25	-14	23.....	-14	24	21	50	60	50	46	62	60	35	28	28
24.....	-20	13	34	40	57	64	65	39	57	18	5	- 3	24.....	- 4	20	21	52	54	59	51	62	56	58	49	20
25.....	-32	24	42	34	47	53	65																		

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 8.—*Daily minimum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.		
1887														1889													
1.	—1	0	26	24	50	58	63	62	49	54	32	15	1.	23	2	29	30	26	40	61	54	58	50	43	15		
2.	—13	15	34	22	60	55	62	56	64	51	30	23	2.	24	23	32	34	33	48	64	61	59	44	43	34		
3.	—8	18	24	37	54	53	65	58	52	48	34	32	3.	28	22	28	36	32	41	60	58	66	44	35	24		
4.	—6	8	20	21	44	56	68	55	50	45	32	34	4.	24	21	26	31	35	38	54	60	65	34	29	21		
5.	2	14	18	18	50	64	68	68	54	42	24	24	5.	30	8	32	26	42	47	49	52	56	41	22	29		
6.	—6	23	32	19	44	66	60	57	64	42	33	22	6.	32	0	28	19	49	40	54	49	48	36	22	25		
7.	—20	33	33	33	51	64	60	49	52	51	40	28	7.	30	8	30	23	58	58	56	49	42	22	30	29		
8.	—8	34	26	27	54	63	64	44	42	60	34	24	8.	32	17	15	26	59	63	61	52	44	18	39	43		
9.	9	24	28	32	51	60	66	51	39	62	26	26	9.	27	7	23	41	61	62	63	66	54	34	42	34		
10.	—8	31	27	42	52	50	55	65	34	48	33	37	10.	18	5	26	33	64	53	65	54	50	30	41	36		
11.	—15	19	23	23	54	55	52	57	72	42	34	29	32	11.	20	16	19	36	56	49	66	46	56	45	41	35	
12.	19	12	30	33	51	52	56	60	48	36	21	27	12.	14	2	34	41	60	54	54	50	50	31	27			
13.	16	6	18	37	45	45	65	52	67	40	18	28	13.	27	—13	29	32	52	65	59	53	41	47	34			
14.	25	18	17	34	46	57	66	61	52	30	41	21	14.	26	13	28	25	51	59	58	62	57	35	35			
15.	20	34	18	45	40	58	62	63	38	23	37	26	15.	26	14	31	32	42	64	57	49	61	28	28			
16.	17	29	19	35	48	62	72	61	51	29	24	22	16.	34	30	31	34	58	63	61	48	52	28	17			
17.	1	24	19	28	54	67	74	60	49	50	30	19	17.	29	23	33	33	66	66	51	48	44	22	43			
18.	—5	28	18	28	45	63	70	60	42	36	24	27	18.	22	11	35	44	66	61	65	46	38	25	35			
19.	—4	23	25	17	40	64	63	54	50	24	18	26	19.	12	1	33	57	68	70	59	38	26	41	33			
20.	30	23	20	32	49	63	58	50	47	29	18	30	20.	20	—2	29	49	47	54	61	62	47	31	44			
21.	14	22	32	38	58	57	64	58	55	32	8	12	21.	10	0	32	44	39	58	54	57	34	23	44			
22.	33	21	21	47	56	53	65	65	50	27	16	5	22.	1	1	29	33	36	52	58	49	28	36				
23.	35	25	14	36	58	48	57	60	36	36	35	7	23.	22	—6	26	38	30	46	54	46	42	25	33			
24.	28	18	30	30	57	46	47	51	25	29	33	9	24.	26	7	30	51	43	45	53	37	17	34				
25.	32	14	23	34	50	45	56	43	43	21	37	4	25.	19	—2	26	41	39	48	46	54	49	40	31			
26.	—1	21	15	35	45	51	55	53	44	15	37	8	26.	28	16	23	35	35	60	53	54	36	42	16			
27.	0	11	23	32	44	48	59	48	49	23	24	19	27.	22	22	35	32	49	63	56	53	36	37	22			
28.	29	10	14	42	48	50	65	40	53	24	11	0	28.	18	17	23	43	32	63	63	51	38	34	20			
29.	25	—7	41	45	52	60	39	58	25	9	0	29.	1	—	22	39	38	60	60	52	39	27	16				
30.	3	—7	32	58	58	61	39	55	19	13	—4	30.	20	—	10	35	36	64	53	53	54	36	9				
31.	1	—1	18	—	63	—	64	44	—	26	16	31.	21	—	30	—	39	—	54	61	—	41	—	15			
1888														1890													
1.	15	26	32	32	31	36	60	63	46	—	53	30	1.	35	27	16	21	40	48	67	65	40	44	30	23		
2.	11	22	31	32	23	43	54	54	36	—	54	30	2.	32	28	14	23	33	49	64	59	45	53	35	7		
3.	13	14	20	23	40	35	55	69	48	—	37	30	3.	25	39	18	38	47	58	69	72	54	49	26	20		
4.	19	28	12	24	46	46	68	70	46	—	32	28	4.	24	38	13	35	47	70	58	71	58	46	29	10		
5.	28	20	10	40	45	48	70	74	45	—	44	28	5.	41	29	5	28	41	70	46	62	64	60	27	19		
6.	29	11	9	36	42	55	62	65	42	43	42	27	6.	29	21	0	33	34	60	54	47	65	53	39	12		
7.	32	19	12	36	44	43	69	62	54	38	27	27	7.	28	23	5	44	29	53	42	55	68	49	46			
8.	19	1	16	25	44	44	62	65	59	38	42	35	8.	26	18	6	44	28	39	68	52	58	43	37	6		
9.	19	—8	22	30	55	58	60	46	47	23	44	34	9.	20	5	9	39	48	48	45	53	52	43	40			
10.	8	—9	35	41	45	58	54	43	40	24	38	28	10.	37	13	32	28	37	64	47	55	56	51	32			
11.	—	0	9	20	33	56	48	61	58	52	31	34	11.	38	14	36	26	31	61	46	46	59	47	30			
12.	—7	4	12	31	40	42	50	55	52	40	30	14	12.	38	27	39	53	37	59	52	43	61	52	28			
13.	—5	20	8	26	33	54	43	46	36	39	30	12	13.	19	22	33	56	53	53	69	56	43	56	30			
14.	—1	19	11	40	36	63	47	48	30	41	40	8	14.	14	36	26	41	45	59	68	59	35	42	28			
15.	—	0	—4	19	34	33	63	51	43	46	45	21	15.	31	25	11	36	46	63	65	59	44	40	18			
16.	—6	1	31	35	40	60	48	71	58	43	26	38	16.	12	28	9	29	40	63	58	50	50	45	38			
17.	11	26	25	33	30	62	58	68	50	36	25	25.	17.	6	34	28	44	64	62	41	41	44	30				
18.	4	30	19	38	44	66	67	55	54	31	26	17.	18.	16	28	37	32	43	64	59	51	43	39				
19.	0	30	34	36	39	65	59	47	43	40	33	15.	19.	24	23	28	22	44	59	54	55	51	42				
20.	8	24	34	28	30	67	53	61	43	35	22	21.	20.	23	17	20	26	44	51	52	48	40	33				
21.	—7	23	16	26	40	71	50	61	42	27	20	10.	21.	9	15	43	24	41	64	42	61	34	29				
22.	—3	21	1	32	42	68	63	48	42	35	23	6.	22.	1	15	33	40	49	64	46	51	45	30				
23.	—1	27	—6	31	44	68	56	38	51	40	22	24.	23.	16	28	22	56	62	54	41	39	42	24				
24.	—2	28	5	24	49	66	54	47	45	32	20	34.	24.	12	34	28	40	59	62	63	43	45	28				
25.	10	19	9	27	54	62	50	54	44	35	26	40.	25.	17	39	39	30	59	67	58	50	35	40				
26.	9	8	31	34	56	58	65	62	48	50	21	36.	26.	36	31	28	40	49	68	51	58	54					

## SUPPLEMENT NO. 2.

TABLE 8.—*Daily minimum temperatures (°F), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1891																									
1.....	42	31	- 4	39	39	59	50	58	49	39	36	18	1.....	30	22	23	38	44	57	63	52	41	49	47	4
2.....	17	27	10	36	41	60	48	59	53	57	21	36	2.....	15	11	18	23	42	61	57	50	37	46	43	- 5
3.....	5	9	19	32	39	60	56	54	55	63	15	40	3.....	1	9	16	45	36	60	58	51	40	53	26	17
4.....	9	0	12	25	37	50	52	51	47	54	18	36	4.....	- 5	- 9	12	41	41	68	47	52	51	47	30	10
5.....	23	8	- 3	20	28	40	49	52	54	42	34	35	5.....	- 10	7	14	31	37	64	63	62	61	43	24	16
6.....	12	30	16	28	31	51	46	53	51	31	27	28	6.....	4	30	15	30	35	54	54	60	53	49	30	7
7.....	4	29	21	23	32	49	55	61	50	40	37	20	7.....	- 1	0	34	36	34	44	62	61	47	28	5	
8.....	3	31	26	23	42	47	46	61	37	33	50	19	8.....	0	- 5	29	42	33	50	65	55	52	37	10	
9.....	18	26	26	30	49	55	44	68	38	35	53	33	9.....	5	12	35	32	45	56	58	49	58	31	29	
10.....	27	19	16	39	55	62	45	70	39	32	47	31	10.....	- 9	27	30	37	41	64	55	57	50	40	17	
11.....	29	18	37	39	45	61	51	71	44	41	37	26	11.....	- 13	25	38	33	52	54	52	57	48	38	14	
12.....	25	24	26	37	38	50	57	64	61	33	33	23	12.....	- 1	9	33	49	53	51	58	62	51	39	15	
13.....	17	26	17	39	35	44	59	51	54	31	28	29	13.....	- 7	21	31	40	49	49	72	49	65	50	32	
14.....	14	22	5	52	38	48	68	62	41	..	27	36	14.....	- 13	27	20	33	47	55	70	51	65	43	24	
15.....	10	22	0	42	38	63	57	52	61	35	29	40	15.....	- 15	27	15	29	47	62	70	51	60	37	20	
16.....	20	44	20	43	38	69	47	56	51	37	38	27	16.....	- 6	21	6	29	44	63	65	60	50	24	18	24
17.....	21	35	17	39	28	67	55	64	64	30	14	16	17.....	- 14	15	22	36	43	58	62	62	37	26	32	21
18.....	24	21	30	57	33	63	62	65	63	47	13	9	18.....	- 1	13	15	40	41	58	58	52	56	28	27	12
19.....	24	19	27	51	37	63	46	65	67	38	16	13	19.....	- 9	6	25	39	35	56	56	54	61	32	21	20
20.....	22	30	28	44	58	65	51	68	55	38	34	20	20.....	- 5	- 8	22	38	53	64	58	51	47	45	16	2
21.....	33	31	31	46	63	65	53	64	61	36	39	26	21.....	9	1	35	32	50	68	50	49	55	35	26	22
22.....	30	24	32	60	45	64	61	58	54	31	48	37	22.....	21	9	31	32	50	60	57	48	50	35	29	
23.....	27	24	30	48	42	58	65	57	54	26	36	33	23.....	24	18	31	30	41	49	59	49	48	43	18	45
24.....	25	44	33	41	37	56	61	51	55	31	25	33	24.....	19	23	34	36	39	53	57	60	38	39	12	45
25.....	18	25	28	33	47	56	46	46	60	36	23	36	25.....	14	12	29	38	53	63	66	66	34	25	6	33
26.....	23	15	29	34	46	63	43	47	60	41	26	18	26.....	6	3	24	38	46	57	64	60	27	38	11	21
27.....	22	10	32	48	34	52	41	52	58	29	24	13	27.....	12	22	21	40	47	57	48	65	30	36	33	25
28.....	25	1	30	44	42	50	52	45	61	20	13	22	28.....	20	27	23	37	40	57	56	62	35	35	30	33
29.....	32	23	32	51	60	55	39	47	33	4	30	29	29.....	15	..	16	39	45	55	68	54	28	29	30	27
30.....	29	35	50	53	59	61	53	43	47	1	23	30	30.....	30	21	40	38	46	54	59	40	45	18	29	20
31.....	29	40	..	49	..	51	47	..	43	..	30	30	31.....	21	..	32	..	51	..	64	42	..	27	..	13
1892																									
1.....	39	32	21	42	48	69	44	55	50	49	50	22	1.....	20	15	31	31	62	41	69	63	46	33	37	34
2.....	18	33	13	55	58	65	52	59	40	37	49	20	2.....	34	6	34	23	57	43	65	65	53	42	41	33
3.....	11	30	19	43	57	55	58	56	44	46	43	33	3.....	37	29	30	28	37	47	54	49	59	52	38	28
4.....	16	29	33	54	52	55	49	60	57	48	28	21	4.....	35	12	38	42	54	47	57	46	68	44	34	23
5.....	- 2	22	28	46	48	61	50	54	55	30	17	18	5.....	33	2	54	35	52	45	46	43	67	46	37	26
6.....	8	16	23	39	46	58	52	59	41	27	28	29	6.....	28	23	34	25	55	35	52	48	61	42	30	25
7.....	2	29	24	40	41	62	51	52	43	45	33	36	7.....	17	36	24	36	47	38	44	59	65	38	33	
8.....	7	30	31	32	32	59	55	64	52	41	23	27	8.....	11	36	32	25	45	43	47	65	72	41	32	34
9.....	- 7	18	28	24	37	60	60	76	51	38	21	25	9.....	20	35	26	28	41	53	47	68	65	32	31	31
10.....	- 12	17	11	26	49	60	59	72	60	35	28	22	10.....	16	30	34	37	52	57	49	60	60	42	26	29
11.....	12	15	11	20	45	57	60	66	61	40	23	18	11.....	26	24	36	34	44	56	62	52	43	37	11	39
12.....	19	3	25	22	40	65	63	54	60	38	27	14	12.....	16	17	27	30	40	64	68	56	47	37	16	35
13.....	14	6	20	23	39	69	67	47	53	41	26	28	13.....	12	12	37	28	47	61	70	58	63	40	26	28
14.....	12	22	6	31	52	64	61	54	50	42	36	33	14.....	31	2	27	44	48	60	56	64	64	31	31	36
15.....	- 10	9	11	22	55	59	62	56	47	54	35	26	15.....	40	6	30	41	48	60	58	61	68	23	30	36
16.....	- 4	5	12	27	45	66	46	58	47	51	33	25	16.....	38	6	32	35	53	64	58	53	49	46	34	39
17.....	14	5	16	39	47	68	48	57	41	48	44	28	17.....	34	18	38	41	67	56	61	45	47	42	22	19
18.....	13	31	14	32	57	67	53	63	45	46	31	26	18.....	34	23	52	43	39	59	62	57	56	28	18	26
19.....	- 8	31	21	30	44	68	63	62	51	41	25	24	19.....	18	19	48	56	33	57	62	52	43	15	12	30
20.....	- 23	30	17	32	43	63	67	57	46	34	15	7	20.....	29	12	39	44	38	51	67	53	43	51	12	30
21.....	7	31	11	41	39	68	55	52	52	40	26	14	21.....	33	6	40	38	44	61	62	52	51	50	26	39
22.....	13	32	26	40	42	66	63	51	61	34	20	14	22.....	25	0	41	38	40	62	50	42	48	26	31	
23.....	19	30	29	34	42	70	63	59	62	30	17	3	23.....	20	9	35	42	46	65	53	48	56	39	30	
24.....	19	28	26	31	43	66	72	58	65	26	14	- 7	24.....	0	- 7	31	40	38	68	54	56	40	26	29	
25.....</																									

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 8.—*Daily minimum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1895														1897												
1.....	10	5	29	33	50	69	52	48	42	30	20	31	1.....	38	4	19	34	37	44	68	64	57	45	47	27	
2.....	6	-11	14	29	53	69	53	46	44	40	17	6	2.....	51	25	20	30	35	43	65	65	48	40	40	14	
3.....	24	-3	21	22	57	68	46	64	53	36	30	1	3.....	49	27	25	31	41	60	69	64	42	33	24		
4.....	8	3	1	30	58	68	45	51	63	42	35	6	4.....	26	21	21	39	45	48	76	66	47	38	36	31	
5.....	11	-16	-2	32	62	59	50	57	55	45	36	11	5.....	15	24	33	45	44	47	73	63	48	50	46	23	
6.....	28	-4	7	44	62	46	58	65	63	34	46	0	6.....	12	34	26	40	50	55	63	52	59	45	39	25	
7.....	31	-7	21	45	61	42	61	59	56	46	55	25	7.....	7	32	18	36	47	50	59	53	49	49	31	29	
8.....	20	-4	23	45	59	43	61	59	52	31	41	22	8.....	20	29	25	29	44	38	66	63	52	35	42	24	
9.....	5	-5	15	38	55	48	56	61	56	29	31	11	9.....	22	27	48	31	52	39	67	57	61	40	35	32	
10.....	21	-2	25	31	61	52	45	64	63	26	23	9	10.....	30	24	35	28	53	44	68	60	58	33	34	51	
11.....	19	-3	15	26	43	57	49	69	68	48	17	24	11.....	25	24	30	33	45	56	64	58	60	48	36	40	
12.....	-8	-11	23	37	31	58	53	62	71	40	18	10	12.....	13	21	27	22	56	54	57	51	62	50	29	35	
13.....	-4	6	24	37	31	62	61	55	56	32	24	-5	13.....	15	24	17	40	50	55	53	43	36	25	33		
14.....	-1	19	5	35	33	54	56	51	48	34	33	11	14.....	24	28	27	38	48	53	54	56	65	60	31	37	
15.....	11	5	9	33	29	56	67	63	48	37	34	20	15.....	15	22	17	32	37	63	54	64	64	67	40	32	
16.....	13	2	12	38	33	50	61	61	63	36	33	15	16.....	31	25	18	37	37	67	63	59	69	59	31	30	
17.....	14	12	18	36	33	61	67	62	66	30	37	35	17.....	36	37	24	32	42	63	62	40	48	33	25	19	
18.....	2	28	26	36	44	57	51	59	70	30	34	18	21.....	21	28	40	33	48	61	64	47	36	31	20	2	
19.....	25	20	21	32	48	66	65	49	70	31	29	46	19.....	12	17	40	31	51	55	64	54	51	44	29	11	
20.....	15	14	25	35	38	60	66	45	70	29	19	50	20.....	11	31	49	16	63	56	65	41	35	54	39	14	
21.....	29	26	16	40	30	54	69	54	67	16	16	35	21.....	26	29	35	30	47	41	70	42	28	45	44	17	
22.....	17	9	19	35	31	56	64	46	66	36	22	30	22.....	15	30	39	51	39	43	66	53	43	38	32	12	
23.....	12	15	23	40	40	47	60	63	49	20	32	38	23.....	5	26	32	51	53	59	62	56	46	34	21	6	
24.....	6	13	37	38	45	63	57	69	33	23	27	37	24.....	-3	12	30	52	45	63	57	54	38	32	14	-7	
25.....	4	33	38	51	49	63	53	56	37	34	30	40	25.....	-21	21	26	52	38	61	60	50	43	34	34	7	
26.....	18	21	29	45	47	65	47	62	66	27	22	17	26.....	-20	12	19	43	36	49	70	44	56	41	38	22	
27.....	-1	32	25	47	41	53	63	65	43	40	13	12	27.....	-6	1	12	29	37	44	65	60	40	47	27	22	
28.....	9	41	28	41	44	52	51	65	35	27	24	19	28.....	-4	12	22	38	49	51	60	46	34	45	20	8	
29.....	-3	31	44	58	50	52	64	44	24	32	28	29	29.....	7	28	55	45	67	58	64	35	35	21	15		
30.....	0	31	48	68	61	57	52	32	13	26	19	30	30.....	10	33	47	46	69	59	46	41	36	12	33		
31.....	-11	31	31	70	.....	45	55	.....	28	9	31	.....	-6	37	.....	33	68	42	.....	57	33	22	22			
1896														1898												
1.....	5	34	24	35	52	45	53	64	43	48	40	9	1.....	9	-3	17	23	52	48	68	64	67	64	54	18	
2.....	24	31	21	19	58	45	62	66	45	40	37	9	2.....	7	-3	22	28	57	55	69	61	70	63	39	31	
3.....	-1	30	19	20	49	52	63	58	60	35	49	6	3.....	21	-8	9	17	50	47	72	66	70	68	27	23	
4.....	-10	30	17	21	63	60	69	63	45	38	52	22	4.....	16	10	20	22	42	61	60	58	71	62	40	29	
5.....	-8	25	16	21	53	65	66	68	53	36	31	25	5.....	17	26	13	16	39	53	52	55	68	63	47	27	
6.....	5	30	29	31	50	65	55	70	49	40	31	36	6.....	29	6	22	20	34	56	48	57	67	43	34	18	
7.....	11	27	27	22	48	69	54	70	43	38	33	28	7.....	21	23	26	22	40	60	54	64	50	45	28	16	
8.....	11	27	26	26	52	60	66	71	49	26	30	33	8.....	30	36	28	23	44	68	58	69	46	52	43	3	
9.....	26	24	19	33	57	61	59	77	55	27	23	32	9.....	21	39	39	43	36	59	56	58	44	37	37	5	
10.....	29	19	25	32	63	57	59	70	65	35	24	31	10.....	32	41	46	40	55	68	45	55	45	43	33	4	
11.....	27	20	14	46	64	47	60	65	62	35	36	28	11.....	30	42	49	35	46	66	42	61	40	58	23	15	
12.....	17	12	1	41	56	48	62	65	63	44	30	37	12.....	34	32	40	34	50	66	46	60	38	44	18	12	
13.....	13	19	0	58	60	55	69	65	61	46	27	34	13.....	31	32	35	40	38	64	49	48	52	46	28	4	
14.....	18	16	1	55	59	53	68	63	64	36	19	26	14.....	31	29	30	42	41	65	61	59	53	37	33	28	
15.....	3	21	20	51	50	58	67	64	60	38	37	26	15.....	31	18	33	42	53	59	59	60	32	28	4		
16.....	3	3	17	61	50	60	58	65	48	35	52	20	16.....	18	3	38	36	56	53	68	64	55	37	19	15	
17.....	20	-3	13	63	60	52	47	48	61	35	58	5	17.....	14	15	38	54	40	53	69	56	43	28	29		
18.....	32	5	29	59	53	49	54	50	45	31	48	27	18.....	12	33	33	41	45	56	69	67	62	42	43	31	
19.....	25	3	26	55	54	57	65	44	53	22	30	7	19.....	20	28	41	40	61	60	69	62	51	40	40	29	
20.....	24	-6	13	41	43	68	70	57	31	34	25	22	20.....	34	31	33	37	61	50	67	56	46	32	29	33	
21.....	21	-1	15	44	51	68	69	59	39	32	33	20	21.....	31	21	42	33	60	47	59	57	45	48	38	35	
22.....	25	7	26	33	56	63	68	64	41	22	29	22	22.....	31	20	51	48	62	44	56	63	61	38	18	36	
23.....	28	34	21	39	50	57	58	65	26	28	24	13	23.....	29	22	31	46	60	51	62	62	37	9	29		
24.....	33	31	18	47	52	61	58	54	37	28	42	-12	24.....	18	13	23	42	57	61							

## SUPPLEMENT NO. 2.

TABLE 8.—*Daily minimum temperatures (° F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1899														1901												
1.....	3	-8	19	19	63	66	48	56	71	20	33	38	1.....	4	9	11	22	46	41	74	51	53	50	39	32	
2.....	10	6	29	21	58	57	56	70	64	38	31	31	2.....	-7	-1	27	32	56	44	72	54	57	42	27	30	
3.....	23	16	35	15	55	55	60	60	67	36	32	31	3.....	-10	24	25	34	43	37	71	61	56	28	33	19	
4.....	43	16	32	23	51	66	61	70	51	47	32	24	4.....	3	21	23	30	33	41	72	55	57	28	22	6	
5.....	18	10	26	21	52	71	64	66	58	40	29	11	5.....	12	9	0	30	36	61	69	48	55	24	18	1	
6.....	21	4	14	29	49	67	64	56	61	36	23	25	6.....	9	3	-1	38	50	58	64	56	58	34	20	9	
7.....	6	1	8	34	45	71	61	49	.....	36	23	20	7.....	31	-6	15	37	52	47	57	51	57	30	37	19	
8.....	5	-6	6	31	51	64	59	51	62	42	27	24	8.....	30	4	29	38	46	38	55	63	57	46	35	33	
9.....	20	-17	17	26	44	61	48	55	49	35	30	28	9.....	27	15	30	30	53	38	51	56	51	60	32	31	
10.....	7	-16	27	29	50	54	52	66	46	48	41	40	10.....	31	0	30	30	53	47	65	60	58	50	20	26	
11.....	9	-10	36	40	53	51	61	60	50	59	39	51	11.....	31	-5	28	31	51	66	68	47	54	48	36	12	
12.....	15	-15	29	46	49	65	59	68	55	55	29	33	12.....	26	14	24	28	41	63	57	54	61	54	34	18	
13.....	35	-17	25	45	54	66	65	54	39	55	29	22	13.....	7	-3	33	41	32	67	54	51	56	43	31	37	
14.....	35	-1	23	52	42	68	65	56	34	63	41	20	14.....	26	-9	32	43	37	65	64	53	50	35	29	9	
15.....	31	16	32	34	46	60	64	53	33	51	44	11	15.....	27	-11	24	38	34	63	68	66	64	37	28	-2	
16.....	36	19	29	32	50	43	70	51	47	54	40	1	16.....	30	9	16	34	37	59	69	51	55	44	29	-8	
17.....	30	28	30	42	53	46	65	51	63	50	37	11	17.....	19	24	32	50	40	63	69	65	47	35	30	0	
18.....	19	31	32	46	53	49	53	55	61	47	51	29	18.....	13	27	35	33	58	57	64	69	37	26	30	1	
19.....	13	28	23	44	39	60	58	57	51	39	40	29	19.....	0	16	33	29	47	62	60	69	32	46	24	-9	
20.....	21	36	18	43	36	67	62	59	48	41	28	21	20.....	10	8	27	30	49	61	57	69	47	35	20	24	
21.....	30	35	22	47	40	53	62	67	36	32	29	26	21.....	33	0	23	32	52	60	65	67	34	36	23	-11	
22.....	24	33	34	47	38	60	58	55	33	38	46	22	22.....	24	3	19	38	53	63	73	68	41	43	29	7	
23.....	32	27	24	50	41	66	64	54	45	55	37	27	23.....	24	-5	28	43	50	66	61	67	54	51	33	30	
24.....	27	19	20	50	45	61	63	55	53	53	29	21	24.....	24	1	47	43	46	59	63	65	52	39	31	28	
25.....	20	23	30	55	47	56	68	65	46	48	35	9	25.....	20	18	51	44	43	66	68	57	55	26	29	32	
26.....	18	34	26	50	54	52	61	64	43	52	29	5	26.....	19	6	38	38	44	67	67	64	48	33	23	31	
27.....	4	23	27	56	62	49	68	63	32	54	28	7	27.....	24	-1	31	36	49	68	63	55	43	20	31	0	
28.....	4	24	26	66	65	60	66	62	49	50	34	7	28.....	21	-7	28	38	46	69	75	62	50	39	11	28	
29.....	-7	.....	15	60	61	53	66	59	41	41	28	3	29.....	6	.....	22	42	40	67	73	64	61	38	32	27	
30.....	-1	.....	23	68	56	45	49	54	29	28	35	-5	30.....	14	.....	30	48	36	63	71	64	53	44	32	22	
31.....	-13	.....	23	.....	59	.....	48	63	.....	36	.....	-1	31.....	-3	.....	29	.....	39	.....	58	57	51	.....	22		
1900														1902												
1.....	1	-5	21	29	42	64	47	54	60	43	47	33	1.....	11	20	33	31	39	62	47	64	66	45	39	27	
2.....	13	0	6	36	45	64	55	58	69	55	33	30	2.....	25	5	27	31	45	63	53	50	52	42	50	26	
3.....	14	10	6	28	33	49	70	62	67	56	31	28	3.....	9	-10	26	27	50	62	63	67	52	49	42	34	
4.....	11	27	20	27	33	45	71	58	49	59	40	33	4.....	4	-5	23	25	53	56	69	60	48	49	41	28	
5.....	33	5	9	26	26	49	72	69	59	61	39	33	5.....	14	-10	23	25	55	49	72	60	38	53	49	19	
6.....	27	29	22	36	32	57	73	71	72	63	28	32	6.....	24	7	23	42	53	50	71	56	47	46	46	22	
7.....	36	34	16	52	43	68	65	66	65	55	34	34	7.....	21	4	34	26	49	62	73	47	51	45	29	18	
8.....	24	38	2	42	53	59	63	66	60	50	30	20	8.....	25	-1	37	22	42	53	67	50	49	38	28	0	
9.....	22	14	17	26	43	45	54	66	64	37	28	23	9.....	24	7	34	39	36	42	70	53	48	43	31	17	
10.....	29	18	30	21	32	51	48	70	60	35	29	14	10.....	24	15	30	35	40	55	56	66	40	33	43	17	
11.....	26	25	17	25	51	62	65	71	69	36	30	18	11.....	20	11	51	44	40	56	49	54	52	45	40	26	
12.....	24	32	4	30	51	54	49	69	60	43	21	10	12.....	16	12	50	38	37	61	57	44	45	50	21		
13.....	27	20	31	30	57	51	51	69	44	50	30	21	13.....	15	7	37	29	49	65	58	54	39	45	52		
14.....	32	13	19	30	63	64	54	61	52	44	19	7	14.....	15	-6	27	32	37	65	67	59	32	35	53		
15.....	32	14	16	37	64	56	70	68	54	39	21	10	15.....	20	10	35	23	31	69	63	54	36	35	23		
16.....	31	3	1	44	57	53	71	66	50	47	9	2	16.....	12	4	25	30	41	60	55	52	39	42	20		
17.....	29	-4	49	51	55	69	62	43	25	28	19	17.....	10	18	11	36	47	48	63	44	45	35	43	19		
18.....	32	9	17	54	52	51	63	68	35	35	48	31.....	27	9	9	37	51	51	63	50	53	46	29			
19.....	39	6	33	41	47	51	67	70	52	41	54	30	19.....	8	-2	13	40	58	60	66	67	54	44	32		
20.....	37	10	22	41	38	48	61	69	59	35	55	22	20.....	13	0	22	37	61	57	63	64	55	33	29		
21.....	24	34	16	48	40	52	59	69	49	49	35	20	21.....	25	21	26	46	56	47	59	61	57	35	36		
22.....	27	28	26	49	41	63	51	66	42	58	32	37	22.....	22	18	33	61	57	42	54	51	54	39	30		
23.....	30	26	34	44	49	63	62	64	52	56	28	39	23.....	20	25	29	33	65	42	57	44	59	55	30		
24.....	24	1	24	47	55	60	67	66	42	51	35	29	24.....	18	33	32	29	60	41	57	45	54	58	26		
25.....	19	-6	24	39	53	60	66	7																		

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 8.—*Daily minimum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1903																									
1.....	9	37	20	38	27	53	69	47	53	62	40	11	1.....	36	3	24	38	26	43	64	52	57	61	20	14
2.....	6	31	23	39	30	54	68	57	50	58	37	4	2.....	18	—7	14	33	36	57	64	46	61	49	14	27
3.....	32	28	24	38	37	47	72	56	57	57	36	3	3.....	6	—7	31	37	49	41	65	52	51	43	32	13
4.....	25	20	33	19	25	50	69	66	58	62	47	25	4.....	2	—7	21	40	57	54	70	62	53	49	29	13
5.....	23	20	35	20	38	56	69	57	57	45	33	19	5.....	19	7	19	29	58	61	64	62	49	47	30	15
6.....	12	20	32	27	43	58	54	62	39	49	23	20	6.....	14	—3	22	26	52	62	60	63	46	45	40	23
7.....	19	21	37	39	43	60	54	45	54	52	17	24	7.....	13	—6	24	29	44	58	64	58	45	35	34	26
8.....	6	22	35	47	37	56	60	51	56	44	26	27	8.....	7	0	26	21	44	45	61	54	48	40	32	26
9.....	4	19	31	42	41	59	69	60	60	41	32	20	9.....	—2	24	24	27	33	48	56	56	49	42	25	24
10.....	—2	28	33	36	45	46	71	55	69	37	32	21	10.....	—4	0	18	41	43	55	57	63	53	47	20	23
11.....	6	33	38	39	49	50	69	54	46	39	36	11	11.....	12	—9	20	37	43	63	58	68	61	35	29	14
12.....	—9	32	40	45	55	45	65	47	63	38	31	17	12.....	24	14	21	26	55	57	64	54	34	35	28	
13.....	—5	28	30	43	48	47	54	51	66	35	30	1	13.....	8	—13	21	30	41	53	62	64	59	33	24	22
14.....	13	22	33	44	52	53	53	47	68	35	31	—1	14.....	3	—16	14	32	57	52	63	41	45	11	17	
15.....	22	21	35	42	49	45	46	47	64	48	29	7	15.....	—3	—11	9	29	56	58	59	62	49	50	25	
16.....	23	4	38	40	43	47	47	62	63	51	44	6	16.....	11	—8	26	27	56	66	55	56	39	34	18	
17.....	22	—11	47	31	51	45	51	51	45	37	21	2	17.....	14	11	29	28	47	64	66	61	37	29	18	
18.....	7	—6	46	32	57	58	60	50	38	33	13	9	18.....	27	4	50	30	46	68	68	61	51	45	32	
19.....	2	—5	54	38	58	58	56	54	36	40	15	19	19.....	27	11	31	28	43	69	73	61	53	23	30	
20.....	5	3	46	36	58	59	60	53	41	45	10	29	20.....	21	25	29	37	40	68	62	54	49	38	31	
21.....	28	12	31	30	56	47	51	49	43	33	16	26	21.....	24	80	28	50	36	66	58	61	51	31	17	
22.....	16	8	26	33	64	57	56	63	49	44	29	19	22.....	10	31	33	27	36	63	51	67	45	31	16	
23.....	12	23	33	27	60	54	57	67	49	31	34	19	23.....	7	28	35	30	37	54	61	65	47	37	20	
24.....	16	15	29	40	56	54	58	65	35	23	24	32	24.....	12	29	40	34	34	54	51	64	37	35	17	
25.....	16	11	32	42	55	49	61	73	37	31	16	12	25.....	3	29	31	41	48	54	50	41	31	27	19	
26.....	25	15	27	32	57	50	66	64	43	30	11	2	26.....	—5	19	45	44	51	62	50	55	37	29	30	
27.....	36	33	41	31	68	53	52	63	50	22	9	5	27.....	16	17	40	49	41	49	48	54	42	36	21	
28.....	35	26	31	39	58	50	57	59	35	30	17	5	28.....	—4	27	49	49	51	49	61	61	52	36	30	
29.....	37	—	23	47	56	51	68	61	37	32	15	6	29.....	—7	—	46	54	55	45	66	60	56	23	29	
30.....	18	—	27	59	49	67	66	58	42	37	18	—1	30.....	30	—	40	39	54	50	63	66	53	21	14	
31.....	19	—	26	—	46	—	52	58	—	34	—8	12	31.....	12	—	36	—	47	—	54	58	—	34	—22	
1904																									
1.....	6	—4	28	50	47	49	52	65	57	47	36	18	1.....	18	8	22	20	51	60	58	60	47	41	18	
2.....	4	6	27	37	42	51	46	54	65	45	33	20	2.....	18	1	29	27	49	57	60	55	40	23	19	
3.....	—14	0	15	27	44	56	44	49	58	32	31	17	3.....	30	5	33	26	45	45	63	58	48	25	18	
4.....	—14	—7	14	21	43	63	59	50	45	38	35	14	4.....	27	15	25	33	46	54	56	62	50	33	14	
5.....	—13	6	27	25	43	66	65	59	51	45	40	12	5.....	24	—1	25	31	48	63	53	68	43	34	30	
6.....	13	39	30	32	50	58	60	60	55	31	25	9	6.....	25	—4	20	31	39	62	50	67	44	39	23	
7.....	16	16	32	33	51	50	63	49	52	27	25	27	7.....	19	—8	28	32	29	69	55	68	49	37	19	
8.....	29	7	28	38	57	54	59	45	56	41	31	25	8.....	11	—3	32	39	31	68	59	68	51	42	39	
9.....	20	4	21	38	45	54	64	44	51	58	27	13	9.....	11	3	30	40	34	63	56	66	57	37	27	
10.....	7	4	29	35	42	51	60	57	51	62	29	14	10.....	18	2	26	40	25	60	62	65	61	29	33	
11.....	14	3	30	30	51	60	50	57	53	23	13	11.....	21	—2	21	39	34	47	60	64	60	22	29		
12.....	15	1	21	33	45	49	64	46	50	44	26	17	12.....	27	12	8	34	49	40	55	55	62	24	26	
13.....	18	8	15	23	56	49	48	55	44	36	29	25	13.....	28	26	19	42	59	47	62	51	66	39		
14.....	10	16	24	22	45	55	58	51	50	29	28	—10	14.....	33	9	20	49	54	57	62	50	49	40		
15.....	0	—2	20	30	38	45	64	46	43	39	28	—6	15.....	35	—1	14	41	47	56	64	55	43	38		
16.....	16	—9	24	23	29	52	54	60	43	32	28	4	16.....	23	4	11	30	55	58	65	61	48	47	23	
17.....	5	—7	24	22	41	45	68	60	48	36	28	12	17.....	19	8	30	63	59	66	50	49	37	22		
18.....	—2	2	8	28	29	46	48	63	57	54	48	33	8.....	30	25	8	34	61	58	49	65	54	37		
19.....	4	1	33	24	47	60	68	55	56	41	32	18	19.....	27	30	23	43	54	56	56	66	59	46		
20.....	33	—6	22	19	49	62	56	59	55	40	43	16	20.....	34	37	16	47	42	57	60	67	68	41		
21.....	32	19	26	23	49	64	61	58	38	39	27	22	21.....	56	34	12	42	36	54	63	68	59	45		
22.....	29	12	35	29	52	52	52	64	34	37	31	19	22.....	46	31	8	35	44	52	64	66	60	48		
23.....	11	27	25	36	62	49	50	47	37	34	25	39	23.....	25	32	2	29	61	48	63	69	54	47		
24.....	—5	14	33	51	48	62	49	46	45	33	32	21	24.....	19	39	14	27	63	49	50	67	41	25		
25.....	—7	2	38	43	58	67	48	55	58	36	27	22	25.....	23	31	18	38	53	57	47	64	41	25		
26.....	1	13	24	41	66	65	50	42	58	33	22	24	26.....	19	24	34	47	65	60	49	67	49	44		
27.....																									

## SUPPLEMENT NO. 2.

TABLE 8.—*Daily minimum temperatures (°F.), Wauseon, Ohio, 1883–1912—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1907														1909												
1.....	31	20	21	19	26	51	65	59	57	34	43	18	1.....	12	-10	27	25	34	59	60	57	41	34	49	23	
2.....	32	9	27	18	27	48	57	55	64	44	44	12	2.....	15	17	29	31	31	56	55	37	33	48	32	32	
3.....	38	6	18	25	30	42	42	44	49	55	38	20	3.....	34	13	30	32	35	62	56	55	41	40	36	36	
4.....	27	4	13	38	32	53	55	45	54	49	30	14	4.....	39	17	21	28	31	63	49	53	37	37	37	37	
5.....	28	6	25	31	27	45	56	55	57	41	34	9	5.....	33	44	15	35	39	62	52	48	42	41	41	40	
6.....	37	-3	15	24	41	44	63	59	51	39	36	21	6.....	6	27	30	54	49	50	55	58	40	38	39	22	
7.....	54	6	22	31	44	39	62	65	58	51	30	30	7.....	4	23	29	42	43	59	54	57	44	37	32	20	
8.....	33	11	28	36	35	50	62	59	59	37	31	37	8.....	8	25	28	29	39	52	51	57	45	39	40	1	
9.....	16	19	19	33	36	43	67	61	51	35	29	42	9.....	26	24	31	27	49	52	53	64	41	31	44	8	
10.....	13	24	24	27	39	52	60	55	54	40	29	23	10.....	34	15	28	18	45	59	60	64	57	49	44	44	
11.....	26	6	18	28	27	51	66	61	52	36	23	22	11.....	15	12	28	22	35	51	68	53	55	41	56	17	
12.....	28	4	36	30	33	56	55	68	55	34	18	20	12.....	-10	25	26	30	38	51	68	61	52	30	50	26	
13.....	29	17	31	29	41	56	53	53	49	33	23	14	13.....	-11	25	29	42	50	61	63	55	30	45	23	23	
14.....	31	19	29	24	60	51	55	51	50	30	18	28	14.....	19	21	27	23	55	59	62	61	30	50	40		
15.....	20	15	27	20	62	56	61	55	60	31	17	28	15.....	19	18	23	27	56	47	62	69	65	28	40		
16.....	20	28	33	27	37	47	72	65	60	47	17	20	16.....	12	10	23	34	52	48	62	63	47	35	38		
17.....	22	26	37	31	39	53	71	65	68	46	18	14	17.....	16	9	10	47	41	60	54	59	45	30	31		
18.....	26	26	25	21	49	58	56	64	64	33	31	23	18.....	0	17	15	49	40	44	62	57	49	39	30		
19.....	33	30	32	31	50	60	58	51	64	25	25	18	19.....	13	34	35	51	42	41	47	60	45	27	32		
20.....	11	17	27	25	34	61	65	63	66	33	36	20	20.....	25	29	30	35	46	47	49	61	50	29	41		
21.....	7	5	31	21	28	62	57	54	54	26	44	28	21.....	33	26	23	39	53	61	58	49	62	47	40		
22.....	-3	-2	52	33	35	62	68	42	41	29	27	24	22.....	43	23	20	39	45	67	61	43	62	35	23		
23.....	-6	2	50	35	46	65	59	51	41	36	25	30	23.....	54	33	19	28	43	70	60	49	58	35	23		
24.....	9	20	38	27	47	63	65	59	48	22	27	22	24.....	43	24	32	26	51	64	53	55	40	30	24		
25.....	7	20	35	39	51	58	68	51	41	35	23	26	25.....	31	17	28	41	49	64	50	62	40	26	22		
26.....	-6	14	50	32	52	63	66	43	30	26	29	23	26.....	25	20	25	25	52	68	55	68	38	36	24		
27.....	-3	17	62	27	37	45	47	55	36	39	28	44	27.....	30	30	32	43	51	69	64	61	39	35	29		
28.....	2	15	49	33	31	52	51	57	49	30	29	25	28.....	16	18	28	25	53	69	64	66	34	26	44		
29.....	16	-	46	46	41	59	58	59	52	25	23	24	29.....	26	-	28	34	49	65	69	57	40	20	30		
30.....	7	-	37	38	49	54	53	64	44	32	23	30	30.....	14	-	25	38	54	64	64	51	38	27	22		
31.....	6	-	27	-	42	-	55	57	-	32	-	22	31.....	-2	-	30	-	61	-	63	50	41	-	9		
1908														1910												
1.....	24	10	22	36	32	45	57	49	63	37	21	21	1.....	21	2	32	27	49	40	64	52	57	53	27		
2.....	17	-3	28	28	33	43	60	55	51	25	22	15	2.....	26	25	31	35	54	36	60	62	46	41	25		
3.....	24	9	19	22	28	54	61	58	36	26	28	11	3.....	9	26	32	41	42	41	63	61	64	49	22		
4.....	28	-8	20	24	33	50	65	66	42	30	18	30	4.....	0	22	28	54	31	44	62	65	66	64	24		
5.....	16	13	26	32	38	52	59	69	51	32	15	3	5.....	15	16	31	56	28	50	52	46	67	64	18		
6.....	19	19	32	31	43	54	68	54	57	39	30	20	6.....	11	6	43	42	29	40	63	46	68	44	15		
7.....	25	17	34	45	44	62	71	55	43	45	28	14	7.....	5	7	27	29	34	45	67	57	53	34	19		
8.....	21	-2	31	39	42	64	47	55	40	38	31	2	8.....	10	24	28	29	41	55	53	64	33	28	8		
9.....	11	0	22	28	38	64	47	51	45	32	36	8	9.....	11	22	21	36	41	63	53	52	43	35	8		
10.....	19	9	24	34	38	47	50	58	52	35	31	-2	10.....	1	16	25	40	41	68	59	40	33	29	29		
11.....	24	21	35	38	48	49	61	53	54	33	25	29	11.....	14	12	21	41	45	55	53	42	41	27	19		
12.....	30	31	34	26	57	55	56	69	67	55	25	16	12.....	27	20	34	32	42	65	55	44	30	3	22		
13.....	17	31	34	37	55	57	56	69	67	55	25	18	13.....	28	8	31	28	33	45	57	50	53	39	19		
14.....	12	32	28	37	50	65	66	60	55	44	16	19	14.....	21	15	22	32	29	54	50	54	48	51	12		
15.....	21	28	36	44	47	49	51	66	53	54	16	34	15.....	21	25	15	47	28	54	65	65	41	30	1		
16.....	18	17	31	28	50	39	54	66	51	46	24	32	16.....	23	18	29	52	39	58	69	64	42	53	4		
17.....	13	10	29	28	56	42	63	70	45	45	16	33	17.....	28	3	27	39	51	65	65	69	58	51	21		
18.....	14	3	31	35	60	57	69	55	46	49	30	31	18.....	25	3	27	39	51	65	65	69	58	51	22		
19.....	22	21	27	46	53	69	58	54	55	52	29	27	19.....	15	-1	34	33	46	60	45	53	58	54	15		
20.....	29	3	22	44	52	65	54	44	63	45	30	26	20.....	33	6	48	38	56	59	48	51	55	51	16		
21.....	35	18	26	26	58	62	59	43	58	46	19	21	21.....	26	23	23	33	57	62	60	56	51	50	31		
22.....	31	1	34	36	58	67	62	54	58	35	30	17	22.....	17	18	45	37	64	58	65	63	45	40	22		
23.....	13	22	41	48	52	72	65	45	57	43	45	12	23.....	18	6	35	35	60	58	65	63	47	33	31		
24.....	8	-6	33	55	53	69	65	50	65	53	49	35	24.....	23	-1	43	34	43	53	66	73	53	41	33		
25.....	22	30	23	61	62	56	62	47	53	36	47	27	25.....	11	3	43	34	43	53	66	73	53	41	33		
26.....	26	17	47	49	64	4																				

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 8.—*Daily minimum temperatures (°F.), Wauseon, Ohio, 1883–1912—Concluded.*

Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1911																									
1.....	25	16	19	19	60	46	61	67	54	51	30	23	1.....	16	5	6	31	39	53	52	48	72	37	30	34
2.....	14	23	26	19	32	56	61	65	56	48	24	29	2.....	14	0	2	32	40	64	58	52	73	37	27	31
3.....	10	21	31	27	28	57	69	63	54	43	21	18	3.....	8	-14	10	26	49	54	68	44	70	42	21	29
4.....	11	25	21	32	29	63	72	60	48	52	29	6	4.....	1	-11	7	28	46	58	62	48	64	47	31	35
5.....	2	18	18	33	29	62	71	64	.....	36	32	18	5.....	-6	-2	7	37	47	44	68	43	63	41	40	35
6.....	16	18	25	39	34	61	73	63	54	48	41	21	6.....	-5	4	9	50	55	57	71	52	68	47	48	27
7.....	17	7	25	27	40	60	63	66	56	42	41	30	7.....	-9	13	15	40	52	41	67	57	67	40	34	21
8.....	20	19	21	28	42	56	66	69	65	36	30	31	8.....	-2	-1	27	28	53	36	68	62	52	32	30	14
9.....	20	12	29	24	58	57	69	56	.....	36	30	47	9.....	-4	-7	12	32	42	47	69	66	58	49	38	12
10.....	20	14	33	24	56	66	73	60	56	54	45	47	10.....	-3	-18	13	33	38	39	65	62	61	54	40	18
11.....	33	7	31	34	63	68	69	68	58	44	53	39	11.....	-3	-2	16	39	54	46	65	58	65	58	48	14
12.....	31	29	31	40	51	55	65	61	59	39	18	31	12.....	-2	-5	28	41	55	64	58	59	45	41	51	7
13.....	32	34	22	46	36	56	54	63	51	42	12	27	13.....	-19	-12	14	40	32	50	70	68	47	36	37	10
14.....	32	36	22	43	37	48	52	67	42	41	20	24	14.....	6	10	23	40	38	53	68	67	62	33	29	25
15.....	21	33	7	39	46	48	51	60	49	42	23	32	15.....	-1	26	9	45	36	64	68	55	65	36	30	31
16.....	12	30	7	30	62	58	64	63	53	45	12	32	16.....	-4	17	3	39	46	62	57	53	53	28	21	35
17.....	15	38	14	27	60	59	58	66	51	50	26	29	17.....	10	26	20	33	44	61	61	53	51	35	27	34
18.....	10	29	27	31	64	56	47	60	60	38	26	24	18.....	22	22	31	34	45	51	61	66	61	53	21	28
19.....	20	19	26	51	64	54	60	51	58	38	27	21	19.....	5	31	35	30	45	53	47	69	47	38	35	25
20.....	28	11	34	41	67	59	62	47	45	45	25	23	20.....	1	23	19	31	46	50	54	66	48	29	35	23
21.....	22	10	26	41	65	54	58	50	54	46	28	34	21.....	8	16	20	40	58	57	65	63	51	35	34	14
22.....	15	20	31	37	65	56	47	52	53	37	22	35	22.....	24	10	15	48	52	47	60	62	60	48	29	16
23.....	12	17	22	31	62	63	50	59	46	34	30	30	23.....	22	11	18	29	63	48	57	54	44	41	32	11
24.....	18	29	17	30	50	67	59	55	51	30	27	27	24.....	13	29	22	37	66	53	70	50	47	31	29	21
25.....	30	30	21	32	51	70	49	56	62	33	24	29	25.....	15	29	11	29	48	53	65	67	56	30	29	25
26.....	37	37	42	31	61	67	46	49	54	41	31	31	26.....	15	25	25	46	51	57	62	71	46	33	30	24
27.....	38	25	26	44	58	73	49	60	51	29	32	19	27.....	1	16	26	43	62	63	55	51	33	32	25	26
28.....	29	20	25	53	62	56	51	64	46	24	32	13	28.....	1	17	27	36	65	59	62	51	37	39	18	19
29.....	33	.....	28	56	63	53	65	47	58	28	24	13	29.....	22	10	29	39	56	63	61	56	42	48	28	30
30.....	19	.....	28	58	57	53	45	44	31	19	30	30	20.....	17	.....	23	36	50	65	54	32	34	20	33	
31.....	17	.....	26	.....	57	.....	59	48	.....	41	20	31	.....	8	.....	33	45	54	56	.....	32	.....	30		

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SUPPLEMENT NO. 2.

TABLE 9.—*Daily precipitation (inches), Wauseon, Ohio, 1883-1912 (including rain and melted snow).*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.					
1883														1885																
1.	0.06	0.26			T.	0.09	0.01	0.01	T.	0.01	0.07		0.01	1.	0.02	0.01	0.01	0.28	0.25		T.	0.60	T.		0.50	0.08				
2.														2.		.01						1.11				.01				
3.	2.50	.22	T.	0.01	0.02	.16	.05	.10	T.		.13			3.			.01	.76	.02	0.64		.05	0.39	0.63		.20				
4.	.32													4.					.06	1.22			.41	0.39	0.11	.28				
5.														5.		.01	.05			.75	.15			.04	.19	.95	.08			
6.		.11	.17	.10		.81	T.			.01	.29			6.		.39	.01	.04		1.09		0.90	.83		.02	.24	.04			
7.		.15	.01	.08		.01			T.	.48	.03			7.		.01	.07	.05	.08	.06		.20	T.		.03		.14	.16		
8.		.13								T.				8.								.22			1.16	.04		.51		
9.														9.								.13			.01	.15		.90		
10.		.06	.05	.06		.30	.02							10.			.03									.05			.01	
11.		.06	.01	.10		.53								11.		.57				.18										
12.						.39	.10	.01			.34	.01		12.		.14	.01		.01	T.					.01	.10	.01			
13.		.16			.20	T.	.01				.39	.05		13.				.01					.05	.06	.38	.81	.44		.08	
14.											T.	.02		14.				.11	.01				.01			.14	.03			
15.		.01	.01	.11		.11						.05		15.		.32	.10	.01	.29				.26	.12					.01	
16.		.02	.09							T.				16.		.44	.03	T.					.01						.02	
17.		.39	.34							.87	T.			17.		.53	.03		.54										.01	
18.			.10			.15	.23				1.10			18.			.03	.02	T.									.11		
19.				T.		.1.13	.12	.16						19.											.59	.04				
20.						.20				T.	.60			20.														.01		
21.		T.												21.		.01	T.												.01	
22.			.02	.01	.10	.54	T.	.37			.34	.04	T.	22.				.57										.01		
23.				.02	.03									23.				.01										.08	.24	
24.		.01	.41											24.			.08	.02	.01										.07	
25.		T.		.03										25.			.02	.02												
26.														26.				.03		.27										
27.														27.				.25	.01											
28.														28.				.05												
29.														29.				.01												
30.														30.																
31.		T.												31.																
Sums.	1.72	5.11	1.73	1.63	5.97	4.73	6.44	1.67	2.96	4.37	2.88	2.41		Sums.	3.22	1.15	.62	3.71	5.61	3.83	3.03	4.36	2.14	3.03	2.73	2.57				
1884														1886																
1.	0.10		0.03	0.06	0.69	0.12	0.05							1.		0.33	0.01	0.02	0.08	0.03									0.05	
2.	.40		.06	.20										2.			0.39													.01
3.			.02											3.			.29													.01
4.				0.22										4.			.19													
5.				1.27										5.			.08													
6.														6.				.02		2.15									.17	
7.														7.					.10									.04		
8.														8.				.12	.08											
9.														9.				.35	.01									.18		
10.														10.						.28								.05		
11.			.02	.34	.25	T.	.03							11.				.05	.24	.02										
12.			.05	.77	.01	T.								12.				.24	.12	.02										
13.				.18										13.				.06	T.	.15										
14.														14.				.01		.23										
15.														15.				.05	.06	.01										
16.														16.				.57												
17.														17.																
18.														18.																
19.														19.																
20.														20.																
21.														21.																
22.														22.																
23.														23.																
24.														24.																
25.														25.																
26.														26.																
27.														27.																
28.														28.																
29.														29.																
30.														30.																
31.														31.																
Sums.	1.93	5.02	2.78	1.42	3.95	2.79	4.20	1.12	1.85	3.01	1.46	3.38		Sums.	2.78	.84	1.56	3.19	2.69	2.01	.31	4.86	4.47	1.94	2.66					

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 9.—*Daily precipitation (inches), Wauseon, Ohio, 1883–1912 (including rain and melted snow)—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1887																										
1.	0.02	0.16	.....	.....	0.11	0.37	.....	.....	0.02	0.31	.....	0.34	1.	.....	0.60	0.04	.....	0.03	0.02	0.01	0.03	.....	0.20	0.32	.....	
2.	.30	.....	.....	.....	.38	.02	.....	.....	.01	.15	.....	.26	2.	.....	.11	.14	.....	.01	0.24	.01	0.03	.....	0.20	0.32	0.07	
3.	.....	.....	.....	.....	.01	.....	.....	.....	.02	.01	.....	.34	3.	.....	.03	.07	.....	.01	0.24	.01	0.03	.....	0.20	0.32	0.07	
4.	.....	.....	.....	.....	0.06	.....	0.67	T.	.11	.01	.....	.....	4.	.....	.02	.....	T.	.....	.06	.....	.20	.....	.....	.....	0.21	
5.	.05	.10	0.61	0.01	.21	.54	.04	T.	.04	.....	.....	.....	5.	.....	.05	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	
6.	.02	.56	.26	.....	.12	.38	.....	.....	.02	.03	.....	.....	6.	.....	T.	T.	.....	.03	.....	.....	.....	.....	.....	.....	.....	
7.	1.57	.....	.....	.....	.....	.....	.....	.....	.01	.01	.....	.01	7.	.....	.01	.06	.....	.46	.....	.....	.....	.....	.....	.....	T.	
8.	.02	.44	.....	.....	.02	.02	.03	.....	.....	.....	.....	.....	8.	.....	.20	T.	.....	.62	.....	.....	.....	.....	.....	.....	.10	
9.	.....	.....	.....	.....	.....	.....	1.13	.....	.....	.....	.....	.....	9.	0.06	.....	.01	.....	.21	.....	.62	.....	.....	.....	.....	.....	
10.	.25	1.15	.....	.....	.....	.....	.....	.....	.....	.06	.03	.52	10.	.....	.08	.....	T.	.15	.....	.....	.....	.....	.....	.04		
11.	.....	.99	T.	.....	.....	.....	.....	0.08	.....	.....	.....	.....	11.	.....	.04	.07	.....	.15	0.02	.....	.....	.....	.....	.....	.01	
12.	.02	.01	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.	.....	.14	.....	1.08	.....	.....	.01	.....	.....	0.45	.....	.....	
13.	.10	.....	.03	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.	.10	.02	.27	.....	.04	.....	.02	.....	.....	19	.....	.....	
14.	.84	.20	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	14.	.....	.97	.....	.04	.69	.56	.....	.....	.....	0.05	.....	.79	
15.	.05	.07	.....	.....	.17	.....	.....	.....	0.02	.....	.....	.....	15.	.....	T.	.....	.01	.03	.....	.....	0.04	.....	.....	.....		
16.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16.	.....	.41	.....	.....	1.08	.....	.02	.04	.....	.....	0.04	.....	
17.	.26	.78	.....	.....	.08	.01	.....	.....	.27	.05	.....	.....	17.	.....	.10	.....	.02	T.	.....	.04	.....	0.02	.....	.14		
18.	.31	.....	.10	.....	.....	.02	.....	.....	.29	.....	.....	.....	18.	.....	.26	T.	.01	.11	.20	1.61	.....	T.	.....	28	.....	
19.	.02	.....	.....	.....	.....	1.22	.....	.....	.....	.03	.13	.02	19.	.....	.24	.....	T.	.01	.05	.....	.....	.....	.....	.12		
20.	.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20.	.....	.....	.....	.....	1.08	.....	.02	.04	.....	.....	.29		
21.	.....	.01	.....	.12	.01	.08	.....	.....	.21	.09	.24	.05	21.	.....	.....	.....	.....	.21	.....	.01	.....	.....	.....	0.05		
22.	.05	.06	.04	.29	.....	.04	.....	.....	.42	.57	.05	.....	22.	.....	.01	.....	.....	.....	.....	.....	.....	0.02	.....	.40		
23.	.14	.08	.....	.12	.71	.05	.....	.....	.....	.41	.01	.02	23.	.....	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....		
24.	.....	.03	.07	.14	.59	.....	.....	.....	.....	.....	.....	.....	24.	.....	T.	.....	.....	.....	.....	.....	.....	.....	.....	0.02		
25.	.11	.....	.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	25.	.....	T.	.....	.....	.....	.....	.....	.....	.....	.....	.03		
26.	.....	.15	.17	.....	.14	.....	.....	.....	.....	0.06	.05	1.91	26.	.....	.52	.....	.29	.....	T.	.....	.01	.20	.....	.01		
27.	.04	.04	.23	.08	.....	.....	.....	.....	.....	30	.....	.74	27.	.....	.11	.....	.02	.33	.....	T.	.....	.02	1.51	.....		
28.	.19	.03	.01	.34	.....	.....	.....	.....	.....	.01	.....	.04	28.	.....	.11	.....	.20	T.	3.02	.01	.63	.....	.25	.....		
29.	.....	.....	.....	.....	.55	.....	.....	.....	.....	.....	.....	.....	29.	.....	.05	.....	1.98	.....	.18	.....	.72	.....	.01	.04		
30.	.....	.....	.....	.....	.05	.....	.....	.....	.....	.....	.....	.....	30.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
31.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31.	.....	1.08	1.77	2.96	1.90	8.22	3.69	4.82	1.54	0.79	0.93	3.67	2.85
Sums.	2.36	7.19	1.49	1.52	3.50	3.55	2.87	1.52	1.70	1.97	3.78	2.69	Sums.	1.08	1.77	2.96	1.90	8.22	3.69	4.82	1.54	0.79	0.93	3.67	2.85	
1888																										
1.	0.18	.....	0.33	0.02	0.01	0.08	.....	0.26	.....	.....	0.21	T.	1.	1.66	.....	0.01	.....	0.11	.....	0.18	T.	.....	0.03	0.09		
2.	.01	.....	.39	.....	.02	.01	.....	.....	.....	.....	0.01	.....	2.	.....	.20	0.01	.....	.....	.....	.....	.....	.....	0.26	.01		
3.	.....	.....	.....	.....	.....	.06	.....	0.09	.13	.....	.....	.....	3.	.....	.12	T.	1.17	.....	.....	.....	.....	.....	0.30	.....		
4.	.11	.....	.....	.....	.04	.....	.....	0.09	.....	.....	0.01	.....	4.	.....	.91	.12	.57	.....	.16	0.02	.....	1.40	.14	.....		
5.	.04	.....	.59	.....	.....	T.	.01	.....	.....	0.20	.04	.019	5.	.....	.56	.....	.....	.....	.....	.....	.....	.....	.....	0.24		
6.	.....	.89	.....	.....	.....	.....	.....	T.	.03	.....	.19	.01	6.	.....	.....	.49	.....	.....	.....	.....	.....	.....	.....	.....		
7.	.29	.03	.....	.....	.....	.....	.....	T.	.01	.....	.06	.....	7.	.....	.....	.57	T.	.....	.....	.....	.....	.....	.....	.....		
8.	.....	.05	.....	.....	1.35	.04	.34	.38	.....	.....	.01	.....	8.	.....	.....	.01	.82	T.	.....	.08	.....	.....	.....	.....		
9.	.....	.....	.....	.....	.33	.....	.....	.....	.....	.....	.....	.....	9.	.....	.05	.....	.50	1.01	.....	.....	.....	.....	.....	.....		
10.	.01	.....	.32	1.13	T.	.02	.....	.....	.....	.....	.....	.....	10.	.....	.04	.....	.33	T.	1.18	.09	.....	.....	.....	.....		
11.	.....	.....	.12	.....	.....	.....	.....	0.06	.02	.....	.85	.08	11.	.....	.....	.....	.25	.....	.59	.....	.....	0.04	.....	.....		
12.	.....	.29	.01	.....	.03	.....	.....	.....	.24	.....	.....	.09	12.	.....	.....	.21	.....	.24	.....	.02	.....	0.04	.....	.29		
13.	.11	.....	.....	.....	T.	.01	.12	.....	.....	.....	.....	.01	13.	.....	.17	.01	.47	T.	.....	.16	.....	1.38	.....	.....		
14.	.....	.18	.....	T.	.03	.12	.....	.....	.....	.....	0.01	.....	14.	.....	.66	.02	.20	.12	.02	.....	.....	.....	.....	.....		
15.	.....	.....	.....	.....	.03	.....	.....	.....	.....	0.01	.15	.08	15.	.....	.09	.02	.08	.....	.....	.....	.....	.....	.....	0.04		
16.	.....	.08	.....	.....	.01	.01	.....	.....	28	.46	.01	.50	16.	.....	.11	.....	T.	.....	.....	.....	.....	.....	0.04	.....		
17.	.12	.....	.....	.....	.01	.....	.....	0.01	.17	.02	.....	.09	17.	.....	.01	.....	.06	.....	.....	0.02	1.00	0.03	.....			
18.	.01	.....	.38	.08	.07	.....	.....	.....	.08	.....	.....	.09	18.	.....	.....	.13	.38	.03	.....	.....	0.01	.....	.....	.....		
19.	.....	.....	.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	19.	.....	.03	.07	.13	.....	.17	.....	.....	0.01	.....	.....		
20.	.....	.....	.31	.10	.01	.....	.....	.....	.....	.....	.....	0.04	20.	.....	.13	.01	.28	.....	.....	.....	0.01	.....	.....	.....		
21.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21.	.....	.01	.....	.18	.....	.18	2.02	.....	2.54	.....	.....		
22.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22.	.....	.....	.....	.11	.....	.....	0.05	.....	.....	.....	0.09		
23.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23.	.....	.....	.07	.11	.....	.....	0.48	.....	.....	.....	.....		
24.	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24.	.....	.01	.01	.01	.....	.27	.....	.....	.....	.....	.....		
25.	.....	.23	.02	.....	.13	.....	.....	.....	.....	.....	.....	.....	25.	.....	.09	.17	.05	.....	.....	.....	.....	.....	.....	.....		
26.	.....	.09	.17	.35	.....	.05	.58	.....	.....	.02	.....	.....	26.	.....	.01	.....	.01	.....	.....	1.10	.....	T.	.....	.....		
27.	.....	.03	.05	.50	.....	.....	.....	0.01	.....	.09	.07	.....	27.	.....	.01	.....	.35	.25	.....	.....	.01	.28	.05	T.		
28.	.10	.02	.21	.....	.34	.60	.....	.....	.03	.01	.04	T.	28.	.....	.09	.....	.91	.....	.....	.....	.01	.....	0.02	T.		
29.	.....																									

## SUPPLEMENT NO. 2.

TABLE 9.—*Daily precipitation (inches), Wauseon, Ohio, 1883–1912 (including rain and melted snow)*—Continued.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1891														1893												
1.....	1.63	0.09	0.12	0.03	0.02	0.40	0.37	T.	T.	0.41	0.02	0.17	1.....	0.72	0.38	0.09	T.	0.35	0.91	0.01	T.			0.04		
2.....	.10	.02	.03	.03	.10	.13	.37	T.	T.	.04			2.....	.07	.38	.09	0.38		.40	1.64			1.74	0.20	.15	
3.....	.20	.18	.11	T.	.10	.10							3.....	.15					.26	T.			.04	.01	.49	
4.....													4.....	.05												
5.....	.04		T.										5.....	.04	.28	T.	T.	.04	.17							
6.....	T.	.04	.13		.44	T.	.86		.02	.16	T.	.28	6.....													
7.....		.02			.02								7.....	.02	.02	.09										
8.....													8.....	.01		1.49	.28									
9.....	T.	.10	.05		T.	.01							9.....	.04	.60	.15										
10....	.04	T.	.47	.06	.01								10....	.37		.05			1.19	T.						
11....	.16		.02	.18	.28	.03							11....	.44	.02	.47	.06	.01								
12....	.01		.05										12....	.04		.29	.35									
13....	.01		.56										13....	.01		.17	.15									
14....			.04	.49									14....	T.	1.07	.14	.36									
15....			.03										15....	.01	.05	T.	.22	.48	T.	.97						
16....													16....	T.												
17....													17....	.28												
18....													18....	.07	.04	T.										
19....													19....	T.	.12	.37										
20....													20....	T.		.16	1.19									
21....	.03	.07	.17	.46	.20								21....	.01	.18	.28	.05									
22....	.06		.01	.55	.10	.01							22....	.01	.01	.49	.03									
23....				.07									23....	.01	.12	.08										
24....													24....	.34		.39	T.									
25....													25....	.02	.03	.07	.32									
26....													26....													
27....													27....	.02	.46	.06	.01	.14								
28....													28....	.06	.11	.01										
29....													29....	.02	.26	T.										
30....													30....	.26												
31....													31....	.01	.40	.89	.13									
Sums....	2.56	4.58	4.45	4.39	1.49	4.21	2.36	3.43	.86	1.85	5.02	1.91	Sums....	2.47	5.34	3.97	6.06	2.32	3.09	5.06	.49	2.06	3.31	3.88	4.69	
1892														1894												
1.....	0.12	0.05	0.07	T.	0.38	1.11		0.55		0.16	0.37		1.....	0.02			0.19	T.	0.20			0.03	0.33	0.21		
2.....	.15	.34		0.35	2.27	.75	0.28	.03		T.	.48	0.05	2.....		.01			0.15								
3.....				T.	.69	.21	.14	1.59	.05		T.		3.....		.10	.15	0.05	.37								
4.....				T.	.25	.92	.20	.08			.15		4.....	0.47	.01	.10	.09									
5.....					.01	.29	.44			.02	0.10		5.....	.66		.01	.13	.70	.06							
6.....						2.03		.88					6.....	T.		.71	.02	.17								
7.....								.08	T.		.06		7.....		.01	.26										
8.....									T.		.07		8.....		.04											
9.....									T.		.07		9.....		.210		.02									
10....													10....		.15		.135	.17	T.	T.	.64	.07	T.			
11....													11....				.02	.04	.12		.06					
12....													12....	T.	1.04	.12		T.								
13....													13....					.01								
14....													14....	T.				.05								
15....													15....	.29	.10	.59		.10								
16....													16....		.02	T.										
17....													17....		.32			.10	.04							
18....													18....		.45	.06	.59	.76	T.							
19....													19....		.01	.47	.12	.01								
20....													20....		.18	.01	.46	.11	.21							
21....													21....		.30	.01	.07	.25	.33	T.	.01					
22....													22....		.43	.32	.42									
23....													23....		.01	T.	.01	.10								
24....													24....		.10											
25....													25....				.05		T.	.03	.06					
26....													26....				.03									
27....													27....				.22	.02	.23		.01					
28....													28....				.15									
29....													29....		.15		.26	.24	T.	.02						
30....													30....		.04											
31....													31....				T.		.05							
Sums....	1.42	3.56	5.54	5.17	11.40	8.65	2.95	2.38	4.61	.37	4.38	2.10	Sums....	2.27	4.48	3.17	3.90	4.11	2.33	0.72	0.87	3.74	2.42	1.80	2.17	

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 9.—*Daily precipitation (inches), Wauseon, Ohio, 1883–1912 (including rain and melted snow)—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.			
1895																												
1.		T.	0.49	0.21	0.08	0.02							0.68	1.	0.28		0.14		0.63	T.	0.17	0.43	0.12	0.33		0.61		
2.				.12									.39	2.	.24		.47		.27	T.	.12					.63	T.	
3.	0.03	0.02			.02									3.	.35	T.	.31		.01								T.	
4.		.04	.40											4.	.34		.12	.86	.02								.20	
5.	.01			T.	.08	.03								5.	.02	0.03	.36	.05									.01	
6.		.19	.12		T.	.48							0.67	6.	.01	.19		.01		.22							.02	
7.	.01	.07			.85	.53							.21	7.		.02			.67								.01	
8.	T.	.02	.09	.13	.22								.01	8.		.11	.94										.18	
9.		.01												9.		2.39	.41	.57									.41	
10.	.17		.02											10.		.07	.01	.39			.98	.03					.21	
11.	.56	T.	.04		.17								.77	11.	.02	.03	.04	.31		.11	T.					.16	.20	
12.	.36		T.	.25		.01							.75	12.	.02	.17	.08	T.		.01						.34	.02	
13.	.12	T.		.12	.31	.01								13.			.97	.05			.37						.03	
14.	.03		.12	.13	.21	T.							0.05	14.		.06	.03	.73		T.	.08					.63	.16	
15.			.02											15.			.27	T.			.27					.41	T.	
16.													.31	16.	.09		.18		.84	.42	.01	.43	.03	.35				
17.													.17	17.	1.02	.11	.01		.04		.01	T.				.46		
18.														18.	.16		.03		.60	.01		.12						
19.	.16	.01			.04								T.	19.			.42	1.25		T.								
20.	.02				.51	.07	.11						T.	20.		.02	.02	.51										
21.	.33	.12		.25	T.	.08							.05	21.	.13	.01	T.									.02		
22.	.05	T.			.04								.16	22.	.15	.08	.10									T.		
23.	.01		T.										.04	23.	.09	.01	.51	.69	.88							.04		
24.	T.		.15			.18							.51	24.	.11		.20	.07	T.									
25.	.05												.06	25.			T.	1.29								.29		
26.	.18		.03		.07	T.	.22	.05	.11				.72	26.		.05	.08									.01		
27.		.25				T.		.20					.02	27.	.10		.05									T.		
28.		.07											.48	28.	.03											.01		
29.	.01												.32	29.	.04		T.		.04							.11		
30.													.04	30.			T.		.77	.07								
31.	.01												.08	31.												T.		
Sums.	2.27	0.76	1.62	2.10	2.75	0.64	0.71	2.82	1.18	1.19	6.30	6.72		Sums.	3.76	1.35	6.66	5.69	3.90	3.33	3.67	1.88	0.76	0.77	5.20	1.88		
1896																												
1.			0.14	0.04	0.03	0.07							0.01	1.		0.03	0.02	T.	0.10	0.12	0.10	T.						
2.	0.05	0.02												2.														
3.														3.														
4.														4.														
5.														5.														
6.														6.														
7.	.03		.42											7.														
8.			.25											8.			.21											
9.														9.			.10	.20	.04	T.								
10.														10.		.05	.03	.03	T.	.43	T.							
11.														11.		.01	.33	.17	T.		.08						.19	
12.														12.		.66	T.	1.00			.25	1.45						.08
13.														13.				1.56				1.37					T.	
14.														14.		.02	.20										.32	
15.														15.		.33	.37	.42									.22	
16.														16.			.01										T.	
17.														17.			T.											
18.														18.			.32	.12	.14								.08	
19.	.43	.15	.07		.29		2.45	.02	.24	.01	T.		.09	19.	.07	.05	2.48	.75	.47						.08			
20.	.01	.06	.64	T.	.12	.05	.40		.40	.20			.02	20.	1.16	.44		.01	.23	.02						.06		
21.														21.			.22	.10	.11								.03	
22.														22.		.67	.13	1.06	.39	.51								
23.														23.			.38	.09	.30	.05								
24.														24.			.08		.04								.08	
25.														25.			.68		.22								.10	
26.														26.			T.											
27.														27.					.69								.01	
28.														28.			T.		.32	.02	.13						.01	
29.														29.														
30.														30.														
31.														31.														
Sums.	2.20	2.24	2.80	6.65	3.44	4.12	11.01	4.24	4.58	1.20	2.25	1.84		Sums.	4.28	2.75	8.08	2.03	3.76	3.57	4.91	2.24	3.22	3.42	3.39	3.28		

## SUPPLEMENT NO. 2.

TABLE 9.—*Daily precipitation (inches), Wauseon, Ohio, 1883-1912 (including rain and melted snow)*—Continued.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1899														1901												
1.													1.													
2.													2.													
3.													3.													
4.													4.													
5.													5.													
6.													6.													
7.													7.													
8.													8.													
9.													9.													
10.													10.													
11.													11.													
12.													12.													
13.													13.													
14.													14.													
15.													15.													
16.													16.													
17.													17.													
18.													18.													
19.													19.													
20.													20.													
21.													21.													
22.													22.													
23.													23.													
24.													24.													
25.													25.													
26.													26.													
27.													27.													
28.													28.													
29.													29.													
30.													30.													
31.													31.													
Sums....	3.90	4.52	5.47	1.10	4.53	1.11	4.52	.84	2.70	2.50	2.17	3.36	Sums....	2.10	1.38	3.57	2.99	3.67	5.15	2.36	1.93	1.95	2.88	1.61	5.73	
1900														1902												
1.													1.													
2.													2.													
3.													3.													
4.													4.													
5.													5.													
6.													6.													
7.													7.													
8.													8.													
9.													9.													
10.													10.													
11.													11.													
12.													12.													
13.													13.													
14.													14.													
15.													15.													
16.													16.													
17.													17.													
18.													18.													
19.													19.													
20.													20.													
21.													21.													
22.													22.													
23.													23.													
24.													24.													
25.													25.													
26.													26.													
27.													27.													
28.													28.													
29.													29.													
30.													30.													
31.													31.													
Sums....	1.50	5.75	2.17	4.04	4.12	3.01	5.71	2.97	1.61	3.09	4.48	.93	Sums....	.71	1.18	4.96	1.30	6.45	7.73	6.24	.86	7.93	2.07	2.37	3.05	

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 9.—*Daily precipitation (inches), Wauseon, Ohio, 1883–1912 (including rain and melted snow)—Continued.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.		
1903																											
1.													1.														
2.	0.29	.07		0.02		0.17	0.50	0.40	T.	0.02	0.31		2.	0.01	0.01	0.04	0.02			0.07	0.03		0.02	0.56	T.		
3.	.03	.73		1.10	.03				T.				3.	.25			.01	.03	.02			.04		.01	.13	.44	
4.	.01	.18	.15	.75	.04				T.	.77	.70	0.32	T.	4.				.02	T.	.10		.04	1.02		.02	.09	.01
5.	.05		.18			.06	.18		T.		.18	.01	T.	5.				.02	.26			.25	1.70	T.	0.05	.52	
6.		.03											6.														
7.	.08	.20	.42	.01									7.														
8.		.56	.40	T.									8.														
9.		T.	T.	T.									9.														
10.													10.														
11.		.42	.50										11.														
12.		.20											12.														
13.													13.														
14.													14.														
15.													15.														
16.		.06	.02	T.									16.														
17.													17.														
18.		T.	.02										18.														
19.													19.														
20.		.05	T.	.31	T.	T.	.05	T.	.05				20.														
21.		.02	T.										21.														
22.		.05		.01	.05	T.	.76						22.														
23.		.01	.01	.25	.36	.90							23.														
24.		.15		T.	.10	T.							24.														
25.		.03			.34	.25							25.														
26.													26.														
27.		.02	1.25	T.									27.														
28.		T.	.52	.27									28.														
29.													29.														
30.		T.											30.														
31.													31.														
Sums...	1.24	4.76	2.51	5.41	2.40	2.77	5.91	4.84	2.48	2.50	1.84	2.27	Sums...	1.66	1.46	1.46	3.48	5.02	6.11	3.57	2.61	1.54	1.85	3.58	1.93		
1904																											
1.													1.														
2.	0.23	0.01	T.	0.97	0.04	0.19	0.26	T.	0.14	0.20		0.03	2.	0.01	0.03	0.35		0.21							T.		
3.	.01	0.01											3.	.37		.33		T.		0.24			0.06		0.25		
4.													4.	.08	.13	.04		0.02	.03	.28							
5.		.18											5.	.04	.02											1.07	
6.		.01	.34	.04		.01	.30		T.				6.		.02		T.	.30		.12		.39		.24			
7.		T.	.28	.08	.06				T.	.41			7.			.03				.20	T.		.01		.88		
8.		.04							T.	.01	T.	.15	T.	8.		.02			.06	.01	2.04	1.40		.03		.02	
9.													9.		.04	.06	.43	.28	1.46			.41		.56	T.	.04	
10.													10.		.01	.07	.07	.01	.05			.85		.06	.14	.11	
11.		.02	.12	.01	.04								11.														
12.		.07	T.	.05	.25								12.														
13.		.07											13.														
14.		.10											14.														
15.		.02	1.09	T.	.15	T.	T.	.25					15.														
16.													16.														
17.													17.														
18.		T.	.41		.10	.02	.06		T.				18.														
19.		.16	.24		.03	.04	1.40		T.	.72			19.														
20.		.02	T.	.06	.05	.14	.04	T.	.23			T.	20.														
21.		1.04							T.	.48	.12	2.68	T.	21.													
22.		1.32	.48	.20					T.	.68	.04	T.	.21	22.													
23.		.80	.02	.18					T.	.07	.54			23.													
24.		.06	.15						T.	.10	.02	T.	.01	24.													
25.		.01	.01						T.	.28	.01	T.	.23	25.													
26.		.34	.01	.20	.21				T.	.16	.11	.80	T.	26.													
27.		T.	.03	.07	.25				T.	.47			T.	27.													
28.													T.	28.													
29.		T.	.07						T.	.15			T.	29.													
30.		T.	1.80		.27	.02	.84		T.	.02			T.	30.													
31.													T.	31.													
Sums...	4.53	3.23	6.30	2.82	3.32	1.72	3.76	2.97	3.86	1.70	0.16	1.09	Sums...	1.08	0.71	2.43	1.00	1.49	3.27	4.38	4.64	2.81	2.35	3.64	3.99		

## SUPPLEMENT NO. 2.

TABLE 9.—*Daily precipitation (inches), Wauseon, Ohio, 1883-1912 (including rain and melted snow)*—Continued.

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
1907														1909												
1.	0.02	0.01	0.27	.	0.10	0.01	T.	0.05	.	0.43	0.04	.	1.	T.	.	0.01	.	0.02	0.15	.	0.15	.	0.91	.		
2.	.	.01	.05	.	.	.98	0.01	.92	0.52	.36	T.	.	2.	T.	.	.	.	.01	0.41	.	.	.	.	.		
3.	.75	T.	.01	.	.	T.	.	T.	.	.53	.03	.03	3.	0.03	.	.10	0.12	T.	.40	.14	.	T.	.	.		
4.	.	11	.	T.	.	11	.21	.42	.44	.	T.	.	4.	.	.16	.	.05	.	.39	.	.	T.	.	.		
5.	.	.	.04	T.	0.03	.34	.03	.16	.43	T.	T.	.	5.	.	.15	0.07	.	.02	.40	.	0.47	.01	.	.03	0.19	
6.	T.	.	.	.	.	.05	.03	.05	.38	.	.	.	6.	.	.	.01	.09	.03	.23	.12	.	.	.	.	.	
7.	.	11	T.	.	.08	.02	.35	.	.	T.	.	.	7.	.	.	.55	1.33	.	.32	.	.	.	.	.	.	
8.	.	14	.	T.	.38	.04	.40	T.	.	.	.	.	8.	.	.	.	.	T.	.	.17	.	.	.	.	.	
9.	T.	.	.	.	.	.02	T.	.	T.	.	.	.	9.	.	.	.06	.	.	.02	.25	.	.	.	.	.	
10.	.	.	.	.	.	.06	.18	.02	.	.	.	.	10.	.	.	.11	.	.	.01	.60	.	.	.	.	.	
11.	.	.	.02	.	.	.01	.07	.30	1.01	.	.	.	11.	.	.	.	.	.	.	.	.	.	.	.	.	
12.	.	.03	.	.	.21	.03	.	.26	.19	.	.	.	12.	.	.	.12	.03	.	.	.	.	.	.	.	.	
13.	.	.	.08	.	.09	.13	.	1.35	.	.	.	.	13.	.	.	.23	.02	.	.	.	.	.	.	.	.	
14.	.	31	.	.04	.03	.05	.	.03	.	.	.	.	14.	.	.	.	.	T.	.	.	.	.	.	.	.	
15.	.	20	.	.	.	.03	.	.13	.	.	.	.	15.	.	.	.	.	.	.	.	.	.	.	.	.	
16.	.	18	.	.	.	.	.	.11	.24	.	.	.	16.	.	.	.	.42	.40	.08	.03	.26	.	.	.	.	
17.	.	38	.	.	.	.	.	.	.02	T.	.	.	17.	.	.	.	.	.	.	.	.	.	.	.	.	
18.	.	08	.	.	.	.	.	.	.07	.	.	.	18.	.	.	.	.	.	.	.	.	.	.	.	.	
19.	.	70	.	.01	.58	.02	.07	.	T.	.	.	.	19.	.	.	.	T.	.	.	.	.	.	.	.	.	
20.	.	09	.	0.09	.	T.	T.	.03	.21	.	.	.	20.	.	.	.	.	.	.	.	.	.	.	.	.	
21.	.	10	.	.01	.	.	.	.	.	.	.	.	21.	.	.	.	.	.	.	.	.	.	.	.	.	
22.	.	02	.	.	.	.	.	.	.	.	.	.	22.	.	.	.	.	.	.	.	.	.	.	.	.	
23.	.	.	.	.	.	.	.	.	T.	1.06	.	.	23.	.	.	.	.	.	.	.	.	.	.	.		
24.	.	.	.08	.	.03	.02	.14	.49	.	.	.	.	24.	.	.	.	.	.	.	.	.	.	.	.	.	
25.	.	.	0.02	.	.	.05	.	.	T.	.	.	.	25.	.	.	.	.	.	.	.	.	.	.	.	.	
26.	.	.	.	.	.	.	.	.	.	.	.	.	26.	.	.	.	.	.	.	.	.	.	.	.	.	
27.	.	.	.01	.	.48	.37	.	.	.	.	.	.	27.	.	.	.	.	.	.	.	.	.	.	.	.	
28.	.	.	T.	.	.33	.01	.	.	.	.	.	.	28.	.	.	.	.	.	.	.	.	.	.	.	.	
29.	.	.	.	.	.04	.08	.	.	T.	.	.	.	29.	.	.	.	.	.	.	.	.	.	.	.	.	
30.	.	.	T.	.	.	.62	.	.01	.	.	.	.	30.	.	.	.	.	.	.	.	.	.	.	.	.	
31.	.	.	.	.	.	.	.	.	.	.	.	.	31.	.	.	.	.	.	.	.	.	.	.	.	.	
Sums....	3.47	.32	2.53	1.80	2.72	4.55	3.60	2.75	4.67	2.63	2.01	3.76	Sums....	3.74	4.89	2.33	3.80	4.07	5.15	3.78	4.84	1.71	1.93	4.85	3.12	
1908														1910												
1.	0.64	0.75	T.	0.09	0.16	T.	.	0.20	T.	T.	.	T.	1.	0.01	T.	0.02	.	0.21	0.02	.	0.02	0.31	0.02	.		
2.	.	T.	.	T.	T.	.	.	.	.	.	.	.	2.	0.01	T.	0.02	.	.15	.02	.	0.02	T.	.	0.04	.	
3.	.	.	.	T.	.	.	.	.	.	.	.	.	3.	.	0.06	0.30	.	.74	.77	.	.	.	.	0.03	0.13	.
4.	.	0.08	.	.58	.34	.03	.14	.	.51	0.10	.	.	4.	.	.	T.	0.43	.	.	.	.	.	0.05	0.04	.	
5.	.	.	.	.	.	.	.	.	.	.	.	.	5.	.	.	.	.32	T.	.	.	.	.	.	0.04	0.01	.
6.	.	.	.	.	.	.	.	.	.	.	.	.	6.	.	.	.	.	T.	.	.	.	.	.	.	.	.
7.	.	.	.	.	.	.	.	.	.	.	.	.	7.	.	.	.	.	T.	.	.	.	.	.	.	.	.
8.	.	.	.	.	.	.	.	.	.	.	.	.	8.	.	.	.	.	T.	.	.	.	.	.	.	.	.
9.	.	.	.	.	.	.	.	.	.	.	.	.	9.	.	.	.	.	T.	.	.	.	.	.	.	.	.
10.	.	.	.	.	.	.	.	.	.	.	.	.	10.	.	.	.	.	T.	.	.	.	.	.	.	.	.
11.	.	.	.	.	.	.	.	.	.	.	.	.	11.	.	.	.	.	T.	.	.	.	.	.	.	.	.
12.	.	.	.	.	.	.	.	.	.	.	.	.	12.	.	.	.	.	T.	.	.	.	.	.	.	.	.
13.	.	.	.	.	.	.	.	.	.	.	.	.	13.	.	.	.	.	T.	.	.	.	.	.	.	.	.
14.	.	.	.	.	.	.	.	.	.	.	.	.	14.	.	.	.	.	T.	.	.	.	.	.	.	.	.
15.	.	.	.	.	.	.	.	.	.	.	.	.	15.	.	.	.	.	T.	.	.	.	.	.	.	.	.
16.	.	.	.	.	.	.	.	.	.	.	.	.	16.	.	.	.	.	T.	.	.	.	.	.	.	.	.
17.	.	.	.	.	.	.	.	.	.	.	.	.	17.	.	.	.	.	T.	.	.	.	.	.	.	.	.
18.	.	.	.	.	.	.	.	.	.	.	.	.	18.	.	.	.	.	T.	.	.	.	.	.	.	.	.
19.	.	.	.	.	.	.	.	.	.	.	.	.	19.	.	.	.	.	T.	.	.	.	.	.	.	.	.
20.	.	.	.	.	.	.	.	.	.	.	.	.	20.	.	.	.	.	T.	.	.	.	.	.	.	.	.
21.	.	.	.	.	.	.	.	.	.	.	.	.	21.	.	.	.	.	T.	.	.	.	.	.	.	.	.
22.	.	.	.	.	.	.	.	.	.	.	.	.	22.	.	.	.	.	T.	.	.	.	.	.	.	.	.
23.	.	.	.	.	.	.	.	.	.	.	.	.	23.	.	.	.	.	T.	.	.	.	.	.	.	.	.
24.	.	.	.	.	.	.	.	.	.	.	.	.	24.	.	.	.	.	T.	.	.	.	.	.	.	.	.
25.	.	.	.	.	.	.	.	.	.	.	.	.	25.	.	.	.	.	T.	.	.	.	.	.	.	.	.
26.	.	.	.	.	.	.	.	.	.	.	.	.	26.	.	.	.	.	T.	.	.	.	.	.	.	.	.
27.	.	.	.	.	.	.	.	.	.	.	.	.	27.	.	.	.	.	T.	.	.	.	.	.	.	.	.
28.	.	.	.	.	.	.	.	.	.	.	.	.	28.	.	.	.	.	T.	.	.	.	.	.	.	.	.
29.	.	.	.	.	.	.	.	.	.	.	.	.	29.	.	.	.	.	T.	.	.	.	.	.	.	.	.
30.	.	.	.	.	.	.	.	.	.	.	.	.	30.	.	.	.	.	T.	.	.	.	.	.	.	.	.
31.	.	.	.	.	.	.	.	.	.	.	.	.	31.	.	.	.	.	T.	.	.	.	.	.	.	.	.
Sums....	1.61	3.43	2.90	2.79	6.07	3.33	4.39	3.39	.49	1.02	1.20	2.17	Sums....	3.16	1.94	.12	5.62	2.68	1.69	4.08	2.56	4.29	1.91	2.61	1.80	

## SMITH—PHENOLOGICAL DATA FOR WAUSEON, OHIO.

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TABLE 9.—*Daily precipitation (inches), Wauseon, Ohio, 1888–1912 (including rain and melted snow)—Concluded.*

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.					
1911														1912																
1.....	0.04	.....	T.	0.02	0.03	0.51	.....	0.29	.....	1.21	T.	0.03	1.....	T.	0.11	.....	T.	0.19	.....	T.	0.09	.....	0.05	.....	0.47	0.04				
2.....	.04	.....	T.	0.02	.01	.02	.....	.....	.....	.20	.....	.03	2.....	T.	.02	.....	T.	.....	T.	.....	.01	0.25	0.03	.09	0.01	.....	.03			
3.....	.01	0.02	.....	.28	T.	.40	.....	.....	.....	.42	.....	.28	3.....	.....	.....	.....	.....	.....	.....	.....	.03	.....	.07	.....	.....	.....	.04			
4.....	.....	.....	T.	.35	.....	.56	.....	.....	.....	.16	.....	.....	4.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....			
5.....	.07	.01	.08	.29	.....	.87	.....	.04	.....	.....	.....	.....	5.....	0.01	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.12	.05		
6.....	.01	.90	.08	T.	.....	.02	.....	.03	0.35	.53	0.63	.....	6.....	.03	T.	.....	.....	.....	.....	.....	.....	.....	.....	.11	.....	.75	.....	.....		
7.....	.04	.....	.....	.01	.....	.10	.....	.....	T.	.....	.01	.02	.12	7.....	.....	.02	0.08	.21	.....	.....	.....	.08	.....	.....	.....	.....	.07	.....	.....	
8.....	.01	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8.....	.....	.....	.02	T.	.....	.....	.....	.....	1.80	T.	.06	.....	.....	T.	.....	.....	
9.....	.....	.....	.....	.....	.....	.02	.....	.69	.....	.....	.....	.....	9.....	.....	.....	.....	T.	.....	.....	.....	.....	.03	.....	.34	.....	.....	.01	.....	.....	
10.....	.....	.....	.....	.....	.....	.04	.....	.03	.....	.....	.....	.....	10.....	.....	.....	.....	.....	.....	.....	.....	.....	.38	.....	.13	.....	.....	.60	.....	T.	
11.....	.29	.....	.....	T.	.....	.12	.....	.02	.....	.....	.....	.....	11.....	.....	.01	.08	.11	.....	.....	.....	.39	.....	.....	1.06	T.	.19	.....	.08		
12.....	.04	.01	.86	.33	.....	.02	.19	.02	.36	.....	1.01	.....	12.....	.....	.03	.05	.17	.02	1.21	T.	.....	.....	.02	.....	.....	.04	.....	.....		
13.....	.42	.02	.....	.06	.....	.01	.....	.....	.33	.02	.....	.....	13.....	.....	.....	.....	.....	.....	.....	.....	.01	.....	.....	.....	.....	.09	.....	.....		
14.....	.48	.47	.....	.10	.....	.....	.....	.....	2.20	T.	.....	.03	.18	14.....	.....	.01	.....	.48	.06	.....	.....	.31	.....	.....	.02	.....	.....	.02	.....	
15.....	T.	.02	.04	.....	.....	.....	.....	.....	.....	.67	.14	.02	.06	15.....	.....	.02	.....	.58	.....	.44	1.16	.....	.....	.....	.....	.....	.....	.....	.02	
16.....	.....	.....	T.	.04	.....	.....	.....	.01	.....	.....	.56	.....	16.....	.....	.....	.....	.....	.....	.....	.....	.13	1.32	.03	T.	.07	.....	.....	.....		
17.....	.....	.11	.....	.....	.....	.37	.61	.01	.....	.....	.43	.90	T.	17.....	.....	.09	.....	.....	.....	.....	.....	.17	.....	.11	.....	.....	.....	.12	.....	
18.....	.....	.39	.....	.08	.....	.23	.....	.02	.26	.....	.....	.....	18.....	.....	.59	.01	.....	.50	.....	.....	.....	.....	.....	.03	.73	.56	.....	.12		
19.....	T.	T.	.....	.30	.....	.....	T.	.....	.71	.....	.....	.....	19.....	.....	.03	.03	T.	.09	.....	.....	.01	.....	.....	.04	.02	.03	.....	.02		
20.....	.01	.06	.....	1.92	.....	.....	.29	.....	.....	.....	.15	.....	20.....	.....	.01	.....	.60	.....	.....	.....	.07	.....	.06	.....	.....	.....	.....	.02		
21.....	T.	.05	.....	.02	.01	.....	.....	.....	.....	.04	.02	.16	21.....	.....	1.22	.23	.....	.....	.....	.....	.11	.42	.....	.....	.....	.....	.....	.....	.....	
22.....	.....	.01	.07	.05	.03	.....	.....	.....	.....	.28	.69	.02	22.....	.....	.04	.12	T.	.18	.....	.....	.....	.21	.....	.94	.43	.....	.....	.....	.....	.....
23.....	.....	T.	T.	.01	.19	.....	.....	.....	.22	.....	T.	.19	T.	23.....	.....	T.	.....	.....	.....	.....	.....	.....	.....	.20	.51	.01	.02	.....	.....	.....
24.....	.....	.....	.....	.12	.03	.37	.22	.....	.....	.04	.....	.....	24.....	.....	.....	.12	.....	.....	.....	.11	.....	T.	.....	.....	.....	.....	.....	.....	.....	
25.....	.....	.....	.....	.....	.....	.49	.03	.72	.04	.....	T.	.....	25.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
26.....	.....	.11	.01	.19	.....	4.04	.11	.....	.04	T.	.....	.18	26.....	.....	.09	.53	.....	.04	.....	.....	.....	.....	.09	.57	.....	.....	.01	.03	.....	
27.....	.....	.18	.....	.28	.....	.....	.....	.....	.01	.01	.12	.06	27.....	.....	T.	.....	.07	.....	T.	.....	.....	.....	.....	.....	.....	.....	.01	.10	.....	
28.....	.....	T.	.....	.....	T.	.02	.....	.....	T.	.83	.....	.34	T.	28.....	.....	.03	.01	.04	.....	.37	T.	.01	.....	.....	.....	.....	.....	.....	.....	.....
29.....	.....	.08	.....	.24	.11	.25	.....	T.	T.	.21	.....	.07	29.....	.....	.02	.01	.51	.16	.31	.....	.53	.49	.02	.09	.....	.....	.04	.....	.38	
30.....	.....	T.	.....	.02	.13	.....	.....	T.	.....	.....	.19	.....	30.....	.....	.04	.....	.....	.29	.11	T.	.....	.04	.32	.....	.09	.....	.....	.....	.....	
31.....	.....	.25	.....	.02	.....	.02	.....	.....	.....	.....	.25	.....	31.....	.....	.01	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Sums.....	2.10	2.09	1.90	4.03	0.83	7.65	2.45	4.11	3.81	5.10	3.83	2.84	Sums.....	1.40	2.23	2.94	1.82	3.78	2.97	1.96	4.49	3.22	2.41	1.61	1.60	.....	.....	.....	.....	

## SUPPLEMENT NO. 2.

TABLE 10.—*Daily normal temperatures (°F.), Wauseon, Ohio, 1870–1909.*

$$[m = \frac{1}{2} (7a + 2p + 9p + 9p).]$$

Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Day.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1 .....	26	20	30	39	52	64	72	72	67	57	44	29	16 .....	24	22	32	44	58	70	74	70	62	52	37	26
2 .....	24	20	31	39	53	64	72	71	68	58	44	30	17 .....	24	25	32	47	60	69	73	69	61	51	38	26
3 .....	23	22	29	41	53	66	72	71	67	59	42	31	18 .....	23	26	36	48	60	70	72	70	63	48	36	25
4 .....	22	20	27	41	54	67	73	70	67	55	43	30	19 .....	24	25	35	49	60	70	72	70	62	48	35	25
5 .....	23	21	29	42	55	67	72	71	66	55	42	29	20 .....	27	25	32	48	61	70	72	70	60	50	36	27
6 .....	24	24	32	43	56	66	72	71	67	53	41	30	21 .....	27	26	33	49	60	68	71	70	60	48	36	25
7 .....	23	24	33	45	56	66	72	71	66	53	42	29	22 .....	26	26	34	50	60	70	72	68	60	49	36	27
8 .....	24	24	32	44	58	66	73	71	66	53	42	28	23 .....	23	27	36	50	61	70	71	69	60	47	34	28
9 .....	22	23	36	44	58	66	73	72	66	54	41	28	24 .....	22	29	35	52	63	72	72	69	60	48	33	25
10 .....	21	24	35	44	57	66	73	72	65	52	40	30	25 .....	23	27	36	50	63	72	73	69	61	48	33	25
11 .....	23	26	35	44	57	67	72	71	65	52	40	30	26 .....	21	27	39	52	61	71	73	67	60	47	33	25
12 .....	23	25	33	46	58	67	73	70	65	50	39	30	27 .....	22	27	39	52	58	71	73	67	59	44	32	25
13 .....	24	24	32	48	57	68	73	70	63	51	38	29	28 .....	22	29	36	54	61	71	73	69	58	44	31	24
14 .....	23	23	30	48	57	69	74	69	63	50	36	28	29 .....	22	26	38	53	62	70	70	69	59	44	28	26
15 .....	24	24	32	46	57	68	73	70	64	52	37	26	30 .....	23	28	51	62	71	72	67	56	44	28	26	
													31 .....	22	22	40	63	63	72	72	68	68	44	44	26

TABLE 11.—*Mean monthly temperatures (°F.), Wauseon, Ohio, 1870-1912.*

$$[m = \frac{1}{2}(7^a + 2p + 9p + 9p).]$$

TABLE 12.—*Monthly and annual precipitation (inches), Wauseon, Ohio (including rain and melted snow), 1870 to 1912*

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TABLE 13.—*Seasonal mean temperatures (°F), Wauseon, Ohio, 1870–1912. Means are from tridaily observations.*

$$\{m = \frac{1}{4}(7a + 2p + 9p + 9p)\}$$

Year.	Winter— Dec. 1 to Feb. 28.	Spring— Mar. 1 to May 31.	Summer— June 1 to Aug. 31.	Autumn— Sept. 1 to Dec. 1.	Growing season— Apr. 1 to Sept. 30.	Nov. 1 to Mar. 31.	Year.	Winter— Dec. 1 to Feb. 28.	Spring— Mar. 1 to May 31.	Summer— June 1 to Aug. 31.	Autumn— Sept. 1 to Dec. 1.	Growing season— Apr. 1 to Sept. 30.	Nov. 1 to Mar. 31.
1870.....	29.2	48.4	69.2	53.0	65.6	30.8	1893.....	20.6	45.9	71.1	50.1	63.1	26.4
1871.....	26.0	50.5	70.6	48.1	63.5	31.7	1894.....	27.1	49.2	72.3	50.1	64.6	32.0
1872.....	21.8	45.4	72.5	48.1	65.0	25.1	1895.....	27.0	47.2	72.4	49.7	66.0	29.7
1873.....	18.6	44.5	72.0	46.6	63.3	23.4	1896.....	26.9	50.8	70.3	49.1	65.3	29.6
1874.....	31.0	44.4	71.7	48.2	63.1	31.2	1897.....	26.2	46.3	69.5	52.9	62.7	31.2
1875.....	17.2	42.8	68.5	48.1	60.6	22.0	1898.....	27.6	49.3	72.0	50.7	64.6	32.6
1876.....	32.6	44.4	72.5	48.3	63.5	32.2	1899.....	23.3	48.3	72.1	52.1	64.9	26.6
1877.....	23.8	43.8	70.7	52.6	63.5	27.2	1900.....	25.9	46.2	71.6	54.8	65.5	28.9
1878.....	32.2	51.6	71.3	51.5	65.0	35.5							
1879.....	22.8	47.4	70.4	51.7	62.6	28.7	1901.....	23.4	46.4	73.2	50.3	64.7	28.7
1880.....	33.0	47.7	69.2	47.9	64.0	33.7	1902.....	23.1	48.4	67.9	52.5	61.5	28.8
1881.....	19.7	45.3	70.2	55.0	64.5	23.6	1903.....	25.1	50.6	67.1	49.1	62.1	32.8
1882.....	32.1	44.9	68.1	51.1	60.6	34.6	1905.....	18.2	44.7	67.1	49.4	60.5	24.7
1883.....	22.1	42.0	67.3	48.7	59.5	26.4	1906.....	20.1	47.0	69.3	48.8	61.4	26.6
1884.....	23.0	45.4	69.3	52.2	63.2	28.5	1907.....	28.9	45.1	69.6	50.7	63.7	30.1
1885.....	17.3	42.2	68.9	48.7	61.6	22.4	1908.....	25.8	44.0	67.4	47.5	59.1	31.1
1886.....	24.1	48.6	70.0	50.0	64.0	29.1	1909.....	26.3	48.2	69.2	51.5	63.1	30.5
1887.....	22.6	47.0	71.7	48.4	64.4	26.7	1910.....	28.9	44.7	68.6	49.8	61.0	31.9
1888.....	23.0	43.7	70.3	48.4	61.9	27.2		23.4	49.0	68.8	49.6	61.9	31.7
1889.....	25.4	47.6	68.1	48.1	61.8	29.8	1911.....	27.0	48.3	70.1	48.6	63.9	29.8
1890.....	34.9	45.4	71.0	49.7	62.8	34.7	1912.....	21.3	45.1	67.9	51.5	62.6	25.1
1891.....	28.8	45.6	69.1	50.7	63.5	31.5							
1892.....	28.2	44.6	71.2	49.1	63.1	30.3	Mean.....	25.2	46.5	70.0	50.0	63.1	29.2

TABLE 14.—*Limiting dates of various temperatures at Wauseon, Ohio, 1870–1912.*

Year.	Last date.		First date.		Temperature reaches 90°F.		Growing seed hibernating.	Year.	Last date.		First date.		Temperature reaches 90°F.	Growing seed hibernating.			
	Temperature to zero.	Temperature to 20°F.	Temperature to zero.	Temperature to 20°F.	First date.	Last date.			Temperature to zero.	Temperature to 20°F.	Temperature to zero.	First date.			Number days from last to first freeze.	Number days from first to last freeze.	
1870.....	Feb. 21	Mar. 18	Dec. 9	Dec. 22	June 24	Sept. 8	176		1893.....	Feb. 20	Mar. 29	Oct. 30	Dec. 2	June 19	Sept. 21	141	216
1871.....	Feb. 13	Feb. 22	Nov. 12	Nov. 25	May 29	Sept. 4	135	204	1894.....	Feb. 25	Mar. 30	Nov. 10	Dec. 28	June 9	Sept. 8	165	200
1872.....	Feb. 14	Apr. 16	Nov. 15	Nov. 30	June 19	Sept. 8	147	225	1895.....	Feb. 12	Mar. 22	Oct. 21	Dec. 6	May 4	Sept. 22	132	240
1873.....	Mar. 5	Mar. 27	Nov. 6	Jan. <sup>1</sup> 15	June 15	Sept. 11	149	219	1896.....	Feb. 21	Apr. 2	Nov. 14	Dec. 24	May 8	Aug. 11	166	190
1874.....	Feb. 8	Apr. 12	Oct. 13	Dec. 31	May 11	Sept. 18	125	217	1897.....	Jan. 31	Apr. 20	Nov. 23	Dec. 24	June 13	Oct. 15	153	213
1875.....	Mar. 22	Apr. 23	Oct. 12	Dec. 18	May 8	Sept. 8	127	241	1898.....	Feb. 3	Apr. 6	Nov. 12	Dec. 14	June 6	Sept. 4	183	218
1876.....	Mar. 19	Mar. 31	Nov. 28	Dec. 9	May 31	Aug. 24	161	239	1899.....	Feb. 14	Apr. 3	Oct. 1	Dec. 30	April 29	Sept. 17	173	165
1877.....	Mar. 17	Mar. 30	Nov. 6	Jan. <sup>1</sup> 7	May 18	Aug. 31	173	205	1900.....	Mar. 17	Mar. 21	Jan. <sup>1</sup> 14	May 14	Oct. 5	Oct. 5	160	223
1878.....	Feb. 4	Feb. 19	Dec. 15	Dec. 23	June 29	Aug. 8	159	193	1901.....	Mar. 6	Mar. 22	Nov. 5	Dec. 15	June 12	Sept. 7	129	208
1879.....	Feb. 27	Apr. 3	Nov. 1	Dec. 18	May 30	Aug. 31	145	207	1902.....	Feb. 20	Mar. 19	Nov. 28	Dec. 27	May 19	Aug. 30	167	238
1880.....	Dec. <sup>2</sup> 20	Apr. 12	Nov. 16	Nov. 18	June 11	Aug. 27	189	199	1903.....	Feb. 19	Feb. 26	Nov. 7	Dec. 14	May 17	Sept. 15	170	187
1881.....	Feb. 25	Apr. 7	Nov. 20	None 0	May 12	Sept. 8	172	195	1904.....	Feb. 20	Apr. 20	Dec. 1	Dec. 14	May 25	Sept. 11	143	208
1882.....	None 0	Apr. 12	Nov. 15	Dec. 7	June 23	July 27	148	218	1905.....	Feb. 16	Mar. 15	Nov. 1	Feb. <sup>5</sup> 5	June 17	Sept. 28	177	208
1883.....	Mar. 24	Apr. 29	Nov. 14	Dec. 17	July 3	Aug. 22	119	207	1906.....	Feb. 15	Apr. 1	Nov. 1	Dec. 23	May 17	Sept. 18	134	217
1884.....	Mar. 4	Mar. 30	Oct. 24	Dec. 17	June 21	Sept. 10	115	262	1907.....	Feb. 22	Apr. 2	Nov. 12	Feb. <sup>10</sup> 2	June 17	Sept. 15	121	231
1885.....	Mar. 22	Apr. 14	Oct. 31	Dec. 7	July 16	Aug. 9	114	233	1908.....	Feb. 24	Mar. 4	Nov. 4	Dec. 10	May 25	Sept. 26	152	220
1886.....	Feb. 5	Apr. 8	Nov. 19	Dec. 2	June 12	Sept. 8	138	257	1909.....	Feb. 1	Apr. 10	Oct. 29	Dec. 29	July 12	Sept. 14	181	215
1887.....	Jan. 27	Apr. 19	Oct. 26	Dec. 28	May 21	Sept. 13	153	206	1910.....	Feb. 24	Mar. 15	Nov. 20	None 0	June 18	Aug. 30	166	216
1888.....	Mar. 23	Mar. 25	Nov. 21	Feb. <sup>13</sup> 13	June 16	Sept. 11	117	239									
1889.....	Feb. 25	Apr. 6	Oct. 8	Mar. <sup>6</sup> 6	May 10	Aug. 30	117	257	1911.....	None	Apr. 2	Nov. 12	Jan. <sup>11</sup> 5	May 17	Sept. 3	172	190
1890.....	Mar. 6	Mar. 16	Nov. 26	Mar. <sup>1</sup> 1	June 17	Aug. 16	163	232	1912.....	Feb. 13	Mar. 25	Nov. 28	Feb. <sup>12</sup> 5	June 26	Sept. 10	174	184
1891.....	Mar. 15	Apr. 5	Nov. 3	Jan. <sup>7</sup> 5	June 14	Sept. 28	180	171	Average	Feb. 20	Mar. 31	Nov. 10	Dec. 28	June 4	Sept. 7	151	215
1892.....	Jan. 27	Apr. 11	Nov. 5	Dec. 24	June 12	Aug. 23	150	215									

<sup>1</sup> 1874.<sup>2</sup> 1878.<sup>3</sup> 1879.<sup>4</sup> 1889.<sup>5</sup> 1890.<sup>6</sup> 1891.<sup>7</sup> 1892.<sup>8</sup> 1901.<sup>9</sup> 1906.<sup>10</sup> 1908.<sup>11</sup> 1912.<sup>12</sup> 1913.

