A NATURALIST’S CALENDAR
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NATURALIST'S CALENDAR

kept at
Swaffham Bulbeck, Cambridgeshire

by
LEONARD BLOMEFIELD
(formerly Jenyns)

SECOND EDITION

Edited by
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INTRODUCTION.

WHEN Mr Blomfield was preparing his Observations in Natural History, of which the Calendar forms a part, he wrote to Mr Darwin asking for contributions. Writing in reply\(^1\) on Oct. 12, 1845, Mr Darwin, after expressing his regret that he cannot add a single fact to it, goes on:—“My work on the species question has impressed me very forcibly with the importance of all such works as your intended one, containing what people are pleased generally to call trifling facts. These are the facts which make one understand the working or economy of nature.” These words refer rather to the notes on the habits of birds and beasts than to the Calendar, which is but a skeleton record, and bears the same relation to a treatise on Natural History that Bradshaw’s Railway Guide bears to a book of travels. But a Calendar if wisely used is not a dull production; as Darwin says\(^2\) “I think it is very amusing to have a list before one’s eyes of the order of appearance of the plants and animals around one; it gives a fresh interest to each fine day.” It was

\(^1\) Life and Letters ii., pp. 31, 32.
\(^2\) Life and Letters i., p. 353. Darwin here refers to the Naturalist’s Pocket Almanack edited by Mr Jenyns for Van Voorst, which appeared for 1843 to 1847.
to a great extent this point of view that induced me to suggest the republication of Mr Blomefield's Calendar.

I find many of my friends—and not necessarily those whose work lies in science—are interested in knowing when to expect the nightingale, or the cuckoo, or when to look for the pasque-flower on Balsham Dyke. And when we have a record made within a few miles of Cambridge, by one of the most accurate of men, the Syndics of the Press are surely right in making it once more easily accessible.¹

¹ Other Calendars have been compiled. Benjamin Stillingfleet has published at the end of his Calendar of Flora 1761 a Calendar "extracted chiefly from Theophrastus' History of plants and put together in the best manner I was able from imperfect materials." Theophrastus gives the appearance of the nightingale as between March 11 and 26, or about a month earlier than in England.

In the same volume of Stillingfleet's is given the Calendar of Alexander Berger made at Upsala in 1755, and published in the Auctitates Academicae of Linnaeus. Berger gives some unexpected information such as "Jan. 2. Wooden walls snap in the night." "Mar. 19. Eyes drop towards the noontide sun." But from April onwards he gives the dates of a large number of phenomena. Stillingfleet himself compiled a Calendar in Norfolk for the same year, 1755, between January 5 to October 26. The following are also worthy of mention. Miscellaneous Tracts and Collections relating to Natural History, selected from the principal writers of Antiquity on that Subject by W. Falconer, M.D. Cambridge, printed by J. Archdeacon and J. Burges, Printers to the University, 1793, 4to, contains calendars for Greece and Italy, compiled chiefly from Theophrastus, and Columella, together with some more modern data on Aleppo and Italy. A Naturalist's Calendar was "extracted from the papers of the late Rev. Gilbert White" by Dr John Aikin and published in 1795; the earliest and latest dates of the numerous phenomena observed, are given, but not a mean date.

The Botanist's Calendar and Pocket Flora, 2 vols., London, 1797, is intended among other things to "assist the investigating Fair One." Calendarium Botanicum or a Botanical Calendar...of all the British
But besides ministering to the wants of the amateur Naturalist, such lists as Blomefield's have a real use as

Plants...arranged according to their time of flowering, by the Rev. William Phelps, London, 1810, 8vo. The Pocket Encyclopedia of Natural Phenomena... compiled from the MSS. of the late T. F. Forster, by T. Forster, London, 1827, contains a “Rustic Calendar” in which a Saint's name is given for each day, together with various natural phenomena and fragments of folk-lore. I have not been able to see L. Jenyn's Naturalist's Pocket Almanack published by Van Voorst from 1843 to 1847.

Quetelet's Observations des Phénomènes Périodiques, Nouveaux Mémoires Acad. R. Bruxelles, T. xv. 1842, contains a mass of observations on times of flowering. The Observations are continued in later volumes of the Mémoires.

Normaler Blütken Kalender von Oesterreich redwirt auf Wien by K. Fritsch, in the Denkschriften of the Vienna Academy, vol. xxvii., 1867, and subsequent years. There are also numerous other pheno-
logical papers by Fritsch in the publications of the Academy. On a method of registering Natural History observations by Alfred Newton, Transactions of the Norfolk and Norwich Naturalists' Society, 1870—
71, p. 24, contains an interesting plate giving in facsimile the authors' shorthand method of recording the phenomena of bird-life; my attention was called to some of the above books by Mr B. D. Jackson of the Linnean Society to whose kindness I am much indebted.

The titles of other calendars are given in his Guide to the Literature of Botany, London (Index Society) 1881, 8vo, pp. 218, 501.

Lastly may be mentioned the unpublished notes of Thomas Gray, the Poet, preserved in the Library of Pembroke College. I am indebted to Mr Whibley for calling my attention to these, and to Mr Minns for the opportunity of examining them. Gray's notes are in two pocket diaries, viz. The Gentleman's and Tradesman's Pocket Assistant or Daily Remembrancer for the year MDCCLXV. A new and Compleat Memorandum Book for General use of all Persons, and a similar, but not identical, book for 1760. The pocket books contain entries of money received and expended, records in Latin of the state of his health, as well as the natural history notes, with which alone we are concerned. He seems to have been especially interested in the weather, and usually gives the direction of the wind and the general character of the day. His observations are irregular and do not
contributions to the science of Phænology. This is a science which has suffered in two ways—viz. from incompleteness in observation, and a too bold style of theorising. In illustration of the first point we may mention Askenasy’s observations on the growth of wild-cherry buds. An ordinary phenologist might have been content with noting the date of flowering of the cherry. But Askenasy took the weight of 100 buds at various times through the year and thus got a true idea of the development of the flower. He also tested the reaction of the buds to warmth at various seasons, showing that in the early autumn they cannot be forced into bloom, whereas in early spring they can be so forced. In this way he showed that there is an inherent periodicity in the plant which cannot be accounted for simply by the direct action of external conditions. It is not meant that the natural changes of temperature through the year have no effect on the periodic phenomena, this is amply contradicted in every garden, merely

furnish anything like a complete Calendar of Nature. In the 1755 book he is diligent up to the end of April, some record occurring practically every day, while on a fair number of days there are numerous entries. The following may serve as examples:

Mar. 2. Chaffinches singing.


Mar. 10. Bazemar-Narcissus blows, 9 inches high (3 flowers) and the leaves 25 inches long.

Ap. 3. Lilac, sweetbryar, and dwarf Almond put out leaves. Snowdrops gone off, and crocus going.

For an interesting series of the Poet’s phenological notes, see The Works of Gray edited by Edmund Gosse, 1884, vol. iii, pp. 88—96.

1 Botanische Zeitung 1877.
that we cannot account for the phenomena entirely by the
course of the temperature. It was in this direction that
the earlier phænologists went wrong. They combined
time and temperature by, for instance, multiplying the
number of days between the sowing of barley and harvest
time by the average temperature of that period. Thus
in Bavaria the average temperature was 17.25, the time
was 100 days, giving a product of 1725. In Cumbal
the temperature was 10.7, the period 168 days, making
1798: and similar constants for other regions agree
fairly. Formule were also constructed in which the
square of the temperature or the square of the time
was made use of. These calculations may perhaps allow
correct predictions to be made in some cases, but as
parts of a wide treatment of periodic phenomena they
have little or no value. Krašan¹ has given some interesting
examples of plants whose periods do not fall within
any known rule. Thus Spiranthes autumnalis flowers
later in southern than in northern regions: Artemisia
and Calluna flower at the same time in the north and
south. Others flower earlier in the south, but not in
proportion to the amount of heat to which they have
been exposed. Others again flower earlier in southern
regions although the sum of heat received is not greater
there than in somewhat more northern places. These
instances are chiefly of interest to us as showing that
the subject is a difficult and complex one, and that to
obtain generalisations of scientific value is no easy
matter. But such considerations need in no way detract
from the interest of Mr Blomefield’s work, his careful
observations have a permanent value.

¹ Engler’s Bot. Jahrb. III.
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His introductory remarks, “On the importance of registers of periodic phenomena” show how much there is to interest the general reader. He points out1 that “however much the seasons may differ in different years, the phenomena generally follow one another in the same order. This indeed is what we might expect, from the circumstance of any interruption in the time of their occurrence, due to seasonal influence, necessarily affecting them all equally. And it follows that those which occur together any one year, will occur at or nearly [at] the same time every other.”

He gives examples of this: thus, on an average, the box-tree and the ground-ivy (Nepeta glechoma) open their flowers together on April 3. While in 1845, a backward year, they flower later, but still close together, viz. April 20 and April 19. Or to extend the coincidences to the animal kingdom, the black-cap does not appear in the north of England till the larches are visibly green, and the wood-warbler make its appearance with the leafing of the oaks and elms.

The Calendar may be respectfully applied to test the accuracy of poets. Thus Shakspeare is quite right in making the daffodil come before the swallow dares, since the latest daffodil flowers on April 4, and the swallow does not appear till April 9 at the earliest. Browning2 is safe too, in letting the chaffinch sing “on the orchard bough” now “That the lowest boughs and the brush-wood sheaf Round the elm-tree bole are in tiny leaf.” For the chaffinch begins his song in

1 Observations in Natural History, p. 332.
2 Further observations give March 28 and 30 for these flowers.
3 “Home-thoughts from abroad.”
February and the elm’s leaves show on April 9. The “blossomed pear tree in the hedge” a line or two later points to April 13. Our Calendar may be used too for a mild antiquarianism. Thus Blomefield says that the “flos-cuculi or cuckoo flower of the older botanists was so called from its opening its flowers about the time of the cookoo’s commencing his call.” The question is what flower is meant: the older botanist referred to is probably Gerarde and he seems to mean Cardamine pratensis known as Lady’s Smock or the Cuckoo Flower. Now the cuckoo begins his song April 29, and Cardamine blossoms April 19. The coincidence is therefore only moderately close, though in Gilbert White’s Calendar they come together thus:—Cardamine April 6—20, Cuckoo April 7—26.

Wood-sorrel, Oxalis acetosella, may have been intended with about equal propriety. Wood-sorrel was known in mediæval latin as panis cuculi and as Cuckoo-sorrel by the Saxons, and in B. Stillingfleet’s Calendar of Flora (1755) it is said to flower on April 16, while the cuckoo begins his notes on April 17. It is interesting to find that in the Swedish Calendar the cuckoo sings on May 12 and the wood-sorrel flowers on May 13. The question remains, could it have been the Cuckoo-pint (Arum maculatum) usually known as Lords and Ladies? This is given as flowering at the right time, May 1—but according to Prior the derivation of the name is of a different kind. Lychnis flos-cuculi the Ragged Robin flowers May 19, and may be left out of consideration.

1 Observations in Natural History, p. 334.
2 Prior’s Popular Names of British Plants, Ed. iii. 1870.
3 Ibid.
Blomefield suggests another possible use for a natural history calendar, namely the regulation of the operations of husbandry by the sequence of nature rather than by dates. “Thus,” he writes, “the middle of March may be, in the long run, the most suitable time for sowing several kinds of grain.” And after pointing out how easily the husbandman may go wrong if he trusts to this date, he continues, “But if he know that the same conditions of soil and atmosphere, which are requisite for his purpose, are also requisite for bringing into flower or leaf any particular plant, he cannot be far out in his reckoning, if he wait for the first appearance of such plant to guide him in his operations.” He thus gives his sanction to the ancient Greek custom. Stillingfleet quotes from the Birds of Aristophanes that “the crane points out the time of sowing” and the appearance of the kite tells you “when it is time to shear your sheep.” And for a more modern example we have, on Solander’s authority, a Swedish proverb “when you see the white wagtail you may turn your sheep into the fields; and when you see the wheat-ear you may sow your grain” The poet Gray used this method when he told his friends not to expect him in Cambridge “till the codlin hedge at Pembroke was out in blossom.”

As regards the author of the Calendar we fortunately have, in his privately printed autobiographical notes, the material for a few words on his life.

1 Observations in Natural History, p. 335.
2 Stillingfleet, pp. 3, 5. The Greek folk lore is from p. viii.
4 Chapters in my Life. With appendix, containing special notices of particular incidents and persons: Leonard Blomefield (late Jenyns).
Leonard Jenyns was born “at 10 p.m.” on May 25, 1800, “in a house in Pall Mall, London, now pulled down, but then occupied by the celebrated Dr [William] Heberden,” who was his uncle on the mother’s side. His father was the Rev. George Leonard Jenyns of Bottisham Hall which he inherited from Soame Jenyns, known as the author of A free inquiry into the nature and origin of evil, London, 1757. A view of the internal evidence of the Christian Religion, London, 1776. Leonard the younger went to a private school at Putney and in 1813 to Eton. He writes (p 6) of his boyhood, “I also, as a boy had that fondness for order, method and precision, which I retained through life; arranging all my things, clothes, books, etc. with great particularity;—neat and tidy in everything. I was likewise somewhat taciturn. My school fellows nicknamed me Methodist and Dummy. This I did not like. But it was true all the same. Through life I have been a man of few words, as regards the staple conversation of ordinary society; and even to old age I have been often called a very particular gentleman.”

For Private Circulation. Bath, 1887. Also an undated pamphlet headed Addenda. See also Mr H. H. Winwood’s “Reminiscences of the late President and Founder of the Club” (The Rev. Leonard Blomefield), read before the Bath Natural History and Antiquarian Field Club, January 10, 1894.

1 Mr Jenyns the elder lived the life of a country gentleman rather than that of a clergyman, although he was a Prebendary of Ely. He came of what is described (Works of Soame Jenyns, 1790, vol. i. p. xv) as “the ancient and respectable family” of Jenyns of Churchhill in Somerset.

2 His change of name occurred in 1871 when the property and surname of Francis Blomefield, “the celebrated historian of Norfolk,” devolved upon him.
At Eton he was fond of experimenting and he was on one occasion introduced to Sir Joseph Banks as the “Eton boy who lit his rooms with gas” (p. 33). Mr Blomefield gave me in conversation another link with the past,—that he occasionally drove to Eton in the carriage of Dr Heberden on his way to see the King at Windsor. From Eton he went to St John’s College, Cambridge, and at the University he made the acquaintance of Prof. Henslow, with whom he was much associated in natural history pursuits; the two friends were further united by the marriage of Henslow with Miss Harriet Jenyns in 1823. Mr Blomefield afterwards wrote the life of his brother in law1.

While at Cambridge Blomefield had the chance of going with FitzRoy in the Beagle, an offer which he declined after a day of hesitation. He seems to have been to some extent instrumental in choosing Charles Darwin for the post.

At Cambridge he saw a good deal of Darwin who often visited him at his Vicarage of Swaffham Bulbeck, and went with him beetle-catchings in the Fens. Darwin says of him in an unpublished passage in his Autobiography, “At first I disliked him from his somewhat grim and sarcastic expression; and it is not often that a first impression is lost; but I was completely mistaken and found him very kind hearted, pleasant and with a good stock of humour.”

Mr Blomefield described the fish in the Zoology of the Voyage of H.M.S. “Beagle”—and continued to correspond with Darwin2.

2 See Life and Letters of Charles Darwin.
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He held the living of Swaffham Bulbeck for nearly thirty years, when he resigned it owing to the ill health of his wife. They moved for a short time to the Isle of Wight and then to Bath, where he remained to the end of his life. There I had the pleasure of being his guest for the meeting of the British Association in 1888 and I remember well his courteous and somewhat formal manner, and the general vigour of his personality—very striking in so old a man. He has left two small indications of his personal appearance which connect him with the past in a curious way. He was as a young man taken by a stranger in a coach for a son of Dr Heberden, and the resemblance was often noticed by his own family. The other instance occurred in later life: Philip Duncan, of New College, Oxford, who died in 1865 at the age of 93, had been in the company of Gilbert White who died in 1793. Blomefield says, “On asking him what sort of man White was—as to height, figure and general appearance—he answered to my great amusement ‘O, much such as you are!’” White was one of Blomefield’s heroes, at Eton he copied out nearly the whole of the Natural History of Selborne “under the apprehension that I might never see the book again” (p. 43), and in 1843 he brought out an edition of the book with notes. Among Blomefield’s other works were a Manual of British Vertebrate Animals (Cambridge) 1836: Observations in Natural History, 1846, from which the present Calendar is taken: Observations in Meteorology, 1858, and a long

1 Jane Daubeney, a niece of the Oxford professor of Botany.
2 Chapters etc., pp. 18, 14.
3 Addenda, p. 67.
series of papers in various scientific journals. His zeal for science was also shown by his founding the “Bath Natural History and Antiquarian Field Club.” He died at Bath September 1, 1893.

As a Naturalist he was known for his minute and scrupulous exactness in matters of fact. Darwin has said, “Accuracy is the soul of Natural History...absolute accuracy is the hardest merit to attain, and the highest merit.” And this quality of Mr Blomefield’s work gives a special value to the Calendar here reprinted.

To those who may be inclined to continue Mr Blomefield’s work I would venture to suggest the observation of those animals and plants of which he only obtained one or two records. It should be a pleasant task to Cambridge Naturalists to complete the faithful work of such a predecessor.

I desire to express my thanks to the authorities of the Museum of Zoology at Cambridge for allowing me to make use of Mr Blomefield’s annotated copy of his Calendar. And I have to thank Mr Rutherford for the assistance he has given me in recalculating the mean dates.

FRANCIS DARWIN.

10 MADINGLEY ROAD,
CAMBRIDGE.

October, 1921.
NOTE ON THE CALENDAR.

Mr Blomefield's Calendar was founded on observations made near Cambridge between the years 1820 and 1831, from these data he calculated the mean date, and recorded the earliest and latest occurrence of each phenomenon. When an observation was made but once the date is “entered under the head of mean, as a place which it is entitled to hold till other observations of the same phenomenon¹” have been made. “When but two observations have been made, and they have occurred on two consecutive days, these two days have been bracketed together under the head of mean².” Mr Blomefield also gave in a separate column his observations for 1845, with a view to showing the actual sequence of phenomena for a single year. In his annotated copy he gave a large number of additional observations for 1846—49. I have thought it best to omit the record of 1845, as a separate entry, and to include its contents in recalculating the means and restating the earliest and latest appearances, with the help of the MS. of 1846—49. In this way it is possible to give, in a good many instances, a mean date founded on the observations of 17 years. The number of years on which each mean is calculated is given in the second column, except in the cases where only a single obser-

¹ Observations in Natural History, p. 362.
² Ibid.
vation was made. The MS. of 1846—49 gives some observations on species which do not occur in the original Calendar, these are included in the present edition.

The index has been enlarged by the addition of the scientific names, because it was found in practice that Mr Blomefield’s index, in which “only the English names are given in general” was not satisfactory. It has been found necessary to alter the form of two or three of Mr Blomefield’s footnotes in consequence of the present version being based on data not included in the original Calendar.

It is fair to Mr Blomefield’s memory to repeat the following words of caution¹ which form part of his introductory pages on the “Importance of Registers of Periodic Phenomena.” “The bulk of the observations having been made and registered many years back, it is extremely probable that there may be some wrong entries by mistake in the journal from which they are now copied, though it is believed that they are generally correct. It will also sometimes happen that the first occurrence of a particular phenomenon is in reality previous to the day of its being first noticed; and this is especially likely to be the case with respect to the appearance of birds and insects, which cannot be watched with the same exactness as plants, and in regard of which the attention is not given to any particular individuals but to the species generally.”

¹ Observations in Natural History, p. 365.