

Cambridge University Press  
978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883  
Edited by John van Wyhe  
Frontmatter  
[More information](#)

---

## CHARLES DARWIN'S SHORTER PUBLICATIONS, 1829–1883

Charles Darwin's words first appeared in print when he was a student at Christ's College, Cambridge, in 1829, and in almost every subsequent year of his life he published essays, articles, letters to editors, or other brief works. These shorter publications contain a wealth of valuable material. They represent an important part of the Darwin visible to the Victorian public. Alongside his ever-present sense of humour, they reveal an even wider variety of his scientific interests and abilities, which continued to his final days. This book brings together all the known shorter publications and printed items Darwin wrote during his lifetime, including his first and last publications, and the first publication, with A. R. Wallace, of the theory of evolution by natural selection. With over 70 newly discovered items, the book is fully edited and annotated, and contains original illustrations and a comprehensive bibliography.

JOHN VAN WYHE is a historian of science based at the University of Cambridge. He is co-editing Darwin's *Beagle* notebooks, also with Cambridge University Press. In 2002 he launched *Darwin Online*, the aim of which is to make freely available online all of Darwin's publications, unpublished manuscripts and associated materials. *Darwin Online* is the largest publication on Darwin ever created and is used by millions of readers around the world. Van Wyhe lectures internationally, and appears frequently on TV, radio and in the press, to discuss the life and work of Darwin.

Cambridge University Press

978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883

Edited by John van Wyhe

Frontmatter

[More information](#)

---

CHARLES DARWIN'S  
SHORTER PUBLICATIONS  
1829–1883

*Edited by*

JOHN VAN WYHE

Christ's College, Cambridge



CAMBRIDGE  
UNIVERSITY PRESS

Cambridge University Press  
978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883  
Edited by John van Wyhe  
Frontmatter  
[More information](#)

---

CAMBRIDGE UNIVERSITY PRESS  
Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi  
Cambridge University Press  
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

[www.cambridge.org](http://www.cambridge.org)  
Information on this title: [www.cambridge.org/9780521888097](http://www.cambridge.org/9780521888097)

© J. van Wyhe 2009

This publication is in copyright. Subject to statutory exception  
and to the provisions of relevant collective licensing agreements,  
no reproduction of any part may take place without  
the written permission of Cambridge University Press.

First published 2009

Printed in the United Kingdom at the University Press, Cambridge

*A catalogue record for this publication is available from the British Library*

ISBN 978-0-521-88809-7 hardback

Cambridge University Press has no responsibility for the persistence or  
accuracy of URLs for external or third-party internet websites referred to  
in this publication, and does not guarantee that any content on such  
websites is, or will remain, accurate or appropriate.

## Contents

<i>Foreword by Janet Browne and Jim Secord</i>	page xv
<i>Introduction</i>	xix
<i>Acknowledgements</i>	xxiv

### CHARLES DARWIN'S SHORTER PUBLICATIONS 1829–1883

#### 1829–1832

[Records of captured insects]. F1968	1
--------------------------------------	---

#### 1835

[Extracts from letters addressed to Professor Henslow]. F1	2
--	---

#### 1836

A letter, containing remarks on the moral state of Tahiti, New Zealand, &c. F1640	15
---	----

#### 1837

[Notes on <i>Rhea americana</i> and <i>Rhea darwinii</i> ]. F1643	31
---	----

[Remarks upon the habits of the genera <i>Geospiza</i> , <i>Camarhynchus</i> , <i>Cactornis</i> and <i>Certhidea</i> of Gould]. F1644	32
---	----

Observations of proofs of recent elevation on the coast of Chili, made during the survey of His Majesty's Ship Beagle commanded by Capt. FitzRoy R. N. F1645	32
--	----

A sketch of the deposits containing extinct Mammalia in the neighbourhood of the Plata. F1646	35
---	----

On certain areas of elevation and subsidence in the Pacific and Indian oceans, as deduced from the study of coral formations. F1647	37
---	----

[Note on an Australian insect.] F2015	39
---------------------------------------	----

#### 1838

On the connexion of certain volcanic phænomena, and on the formation of mountain-chains and volcanos, as the effects of continental elevations. F1649	40
---	----

[Notes on Cocos-Keeling Island plants]. F1959	45
---	----

Copy of a memorial presented to the Chancellor of the Exchequer, recommending the purchase of fossil remains for the British Museum. F1944	46
--	----

On the formation of mould. F1648	48
----------------------------------	----

<b>1839</b>		
	Observations on the parallel roads of Glen Roy, and of other parts of Lochaber in Scotland, with an attempt to prove that they are of marine origin. F1653	50
	Questions about the breeding of animals. F262	91
	Note on a rock seen on an iceberg in 61° south latitude. F1652	95
<b>1840</b>		
	On the connexion of certain volcanic phenomena in South America; and on the formation of mountain chains and volcanos, as the effect of the same powers by which continents are elevated. F1656	97
	On the formation of mould. F1655	124
	[Notes on Chilean beetles.] F2010	128
<b>1841</b>		
	Queries respecting the human race, to be addressed to travellers and others. F1975*	128
	[Notes on South American beetles.] F2016	128
	On the distribution of erratic boulders and on the contemporaneous unstratified deposits of South America. F1657	128
	[Notes on South American spiders.] F2011	133
	Humble-bees. F1658	134
	On a remarkable bar of sandstone off Pernambuco, on the coast of Brazil. F266	137
	[Note on a ground-beetle found off the Straits of Magellan.] F2012	140
<b>1842</b>		
	[Notes on South American beetles.] F2013	140
	[Note on a mushroom from Maldonado.] F2014	140
	Notes on the effects produced by the ancient glaciers of Caernarvonshire, and on the boulders transported by floating ice. F1660	140
	On the distribution of the erratic boulders and on the contemporaneous unstratified deposits of South America. F1661	147
	<i>Report of a Committee appointed "to consider the rules by which the nomenclature of Zoology may be established on a uniform and permanent basis."</i> F1661a*	162
<b>1843</b>		
	Remarks on the preceding paper in a letter from Charles Darwin, Esq. to Mr Maclaren. F1662	162
	Double flowers—their origin. F1663	165
<b>1844</b>		
	Observations on the structure and propagation of the genus <i>Sagitta</i> . F1664	167
	[Extracts from letters on guanacos]. F1833	172
	On the origin of mould. F1665	173
	Manures and steeping seed. F1666	174
	Variegated leaves. F1667	175
	What is the action of common salt on carbonate of lime? F1668	176
	Mr. Darwin's Memorandum [on rust in wheat]. F1668a	176

\* Items omitted for lack of space are indicated with\*

	<i>Contents</i>	vii
	An account of some seeds buried in a sand-pit which germinated. F1918	177
	Brief descriptions of several terrestrial <i>planariae</i> , and of some remarkable marine species, with an account of their habits. F1669	179
<b>1845</b>	Extracts from letters to the General Secretary, on the analogy of the structure of some volcanic rocks with that of glaciers. F1670	188
	[Letter on Patagonian stone]. F1989	188
	On an edible fungus from Tierra del Fuego. F1671	189
	<i>Additional testimonials submitted to the Council of University College, London, by Edward William Brayley.</i> F324a	191
	<i>Testimonials in favour of Joseph Dalton Hooker.</i> F2030	191
<b>1846</b>	[Note on sandstone and query on coral reefs]. F1915	192
	An account of the fine dust which often falls on vessels in the Atlantic ocean. F1672	192
	On the geology of the Falkland Islands. F1674	196
<b>1847</b>	[Review of] <i>A natural history of the Mammalia.</i> F1675	204
	Salt. F1676	207
	Copy of Memorial to the First Lord of the Treasury, respecting the Management of the British Museum. F1831	207
<b>1848</b>	On the transportal of erratic boulders from a lower to a higher level. F1677	209
<b>1849</b>	Geology. In <i>A manual of scientific enquiry.</i> F325	217
	On the use of the microscope on board ship. In <i>A manual of scientific enquiry.</i> F1822	235
	[Letter on floating ice]. F1816	241
<b>1850</b>	On British fossil Lepadidæ. F1679	241
<b>1851</b>	[Notes on a Galapagos lichen]. F2017	242
	<i>Testimonials for Thomas H. Huxley.</i> F344	242
<b>1852</b>	Bucket ropes for wells. F1680	242
	[Letter on the bookselling question]. F1912	243
<b>1853</b>	[Description of Patagonian fossil beds]. F1820	243
	Tanks and hose. F1807	243
<b>1855</b>	On the power of icebergs to make rectilinear uniformly-directed grooves across a submarine undulatory surface. F1681	244
	Does sea-water kill seeds? F1682	246
	Does sea-water kill seeds? F1683	247
	Lizard's eggs. F1808	249
	Nectar-secreting organs of plants. F1684	250

Shell rain in the Isle of Wight. F1685	250
Vitality of seeds. F1686	251
Effect of salt-water on the germination of seeds. F1687	252
Effect of salt-water on the germination of seeds. F1688	253
Longevity of seeds. F1689	254
Seedling fruit trees. F1690	254
<b>1856</b>	
[Typical list of cirripedia]. F1977	255
Cross breeding. F1691	256
[Announcement of the award of a Royal Medal to John Richardson]. F1936	256
<b>1857</b>	
Hybrid Dianths. F1693	257
On the action of sea-water on the germination of seeds. F1694	258
Mouse-coloured breed of ponies. F1695	266
The subject of deep wells. F1696	266
Bees and the fertilisation of kidney beans. F1697	267
Productiveness of foreign seed. F1698	268
<b>1858</b>	
[Letter on zoological nomenclature]. F1983	269
Memorial on proposed severance from the British Museum of its natural history collections. F1942	269
On the agency of bees in the fertilisation of papilionaceous flowers, and on the crossing of kidney beans. F1701	272
[Memorial] Public natural history collections. F1702	278
[Contribution to the Field-Lane refuges]. F1935	282
On the tendency of species to form varieties; and on the perpetuation of varieties and species by natural means of selection. F350	282
<b>1859</b>	
[Letter on the collections of the British Museum]. F1934	296
Coleoptera at Down. F1703	297
<b>1860</b>	
Cross-bred plants. F1704	297
Natural selection. F1705	299
Intercourse between common and Ligurian bees. F1814	299
Fertilisation of British orchids by insect agency. F1706	300
Do the Tineina or other small moths suck flowers, and if so what flowers? F1708	302
Irritability of Drosera. F1813	303
<b>1861</b>	
Note on the achenia of <i>Pumilio argyrolepis</i> . F1709	303
Fertilisation of British orchids by insect agency. F1706	305
Dun horses. F1960	306
Influence of the form of the brain on the character of fowls. F1961	306
Phenomena in the cross-breeding of plants. F1713	307
On dun horses, and on the effect of crossing differently coloured breeds. F1962	308

## Contents

ix

Cross-breeding in plants. Fertilisation of <i>Leschenaultia formosa</i> . F1714	309
Dun horses. F1963	311
Fertilisation of Vincas. F1836	311
Cause of the variation of flowers. F1715	312
Effects of different kinds of pollen. F1823	314
Parents of some gladioli. F1819	315
Orchids, Fertilization of. F1712	315
Vincas. F1716	316
Is the female bombus fertilised in the air? F1818	316
<b>1862</b>	
[Recollections of Professor Henslow]. F830	317
Do bees vary in different parts of Great Britain. F1716a	319
Bees in Jamaica increase the size and substance of their cells. F1826	320
Bee-cells in Jamaica not larger than in England. F1824	321
On the three remarkable sexual forms of <i>Catasetum tridentatum</i> . F1718*	321
Peas. F1719	321
On the two forms, or dimorphic condition, in the species of <i>Primula</i> . F1717*	322
Cross-breeds of strawberries. F1720	322
Variations effected by cultivation. F1721	323
Penguin ducks. F1825	324
<b>1863</b>	
On the so-called "auditory-sac" of Cirripedes. F1722	324
Influence of pollen on the appearance of seed. F1828	327
Vindication of Gärtner—effect of crossing peas. F1727a	327
On the existence of two forms, and on their reciprocal sexual relation, in several species of the genus <i>Linum</i> . F1723*	329
Fertilisation of orchids. F1724a	329
[Review of] Contributions to an insect fauna of the Amazon Valley. By Henry Walter Bates. F1725	330
The doctrine of heterogeny and modification of species. F1729	334
Origin of species. F1730	337
[Letter on yellow rain]. F1727	338
Appearance of a plant in a singular place. F1727b	338
Vermin and traps. F1728	339
Lettre de M. Darwin à M. de Quatrefages. F1837	340
On the thickness of the Pampean formation, near Buenos Ayres. F1724	342
<b>1864</b>	
On the sexual relations of the three forms of <i>Lythrum salicaria</i> . F1731*	345
Ancient gardening. F1732	346
[Letter to the Council of the Royal Horticultural Society]. F1910	346
<b>1865</b>	
On the movements and habits of climbing plants. F1733*	347
<i>Testimonials in favour of Mr. Adam White</i> . F345b	347
Note on <i>Medicago lupulina</i> . F1809	348



<b>1866</b>		
	Partial change of sex in unisexual flowers. F1735	348
	[Note on the common broom, <i>Cytisus scoparius</i> ]. F1737	349
	<i>Oxalis bowei</i> . F1736	349
	Cross-fertilising papilionaceous flowers. F1737a	350
	Feet of otter hounds. F1930	351
<b>1867</b>		
	Queries about expression. F876	351
	Cut or uncut. F1815	353
	Fertilisation of Cyripediums. F1738	354
	Hedgehogs. F1740	355
<b>1868</b>		
	On the character and hybrid-like nature of the offspring from the illegitimate unions of dimorphic and trimorphic plants. F1742	356
	[Inquiry about sex ratios in domestic animals]. F1743	356
	On the specific difference between <i>Primula veris</i> , Brit. Fl. (var. <i>officinalis</i> , of Linn.), <i>P. vulgaris</i> , Brit. Fl. (var. <i>acaulis</i> , Linn.) and <i>P. elatior</i> , Jacq.; and on the hybrid nature of the common Oxlip. With supplementary remarks on naturally-produced Hybrids in the genus <i>Verbascum</i> . F1744*	356
	<b>Undated</b> [Printed acknowledgement of correspondence]. F1958	357
<b>1869</b>		
	The formation of mould by worms. F1745	357
	Origin of species [On reproductive potential of elephants]. F1746	358
	Origin of species [On reproductive potential of elephants]. F1747	359
	Notes on the fertilization of orchids. F1748	360
	[Extract of a letter on fertilisation of <i>Vinca</i> by insects]. F1971	360
	The fertilisation of winter-flowering plants. F1748a	361
	Pangensis.—Mr. Darwin's reply to Professor Delpino. F1748b	361
<b>1870</b>		
	[Letter on marine shells in the Amazon]. F1990	363
	[Note on the age of certain birds]. F1991	363
	[Note on Darwin's papers to the Plinian Society 27 March 1827]. F1749	364
	Memorial to the Right. Hon. the Chancellor of the Exchequer. F869	364
	[Letter of apology regarding the honorary degree ceremony at Oxford]. F1940	365
	Notes on the habits of the pampas woodpecker ( <i>Colaptes campestris</i> ). F1750	365
<b>1871</b>		
	[Two letters to C. Boner]. F1950	367
	Pangensis. F1751	368
	[Letter to C. L. Balch of the New York Liberal Club]. A letter from Mr. Darwin. F1981	369
	A letter from Mr. Darwin [ <i>The Index</i> ]. F1753	370
	A new view of Darwinism. F1754	370
	Fertilisation of Leschenaultia. F1755	371

## Contents

xi

<b>1872</b>		
	Mr. Ayrton and Dr. Hooker. F1937*	373
	Bree on Darwinism. F1756	373
<b>1873</b>		
	Natural selection. F1758	374
	Inherited instinct. F1757	375
	<i>Testimonials in favour of W. Boyd Dawkins.</i> F1216	376
	Perception in the lower animals. F1759	376
	Origin of certain instincts. F1760	377
	Instinct: Perception in ants. F1810	381
	Habits of ants. F1761	381
	On the males and complemental males of certain cirripedes, and on rudimentary structures. F1762	382
	[Note on nematodes]. F1974	386
<b>1874</b>		
	Memorial presented to the First Lord of the Treasury, respecting the National Herbaria. F1954	386
	Recent researches on termites and honey-bees. F1768	388
	Fertilisation of the Fumariaceæ. F1769	389
	Flowers of the primrose destroyed by birds. F1770	390
	Flowers of the primrose destroyed by birds. F1771	391
	[Memoranda on <i>Drosera filiformis</i> ]. F1932	393
	[Irritability of <i>Pinguicula</i> ]. F1767	394
<b>1875</b>		
	[Memorial to A. H. Gordon, Governor of Mauritius, requesting the protection of the Giant Tortoise on Aldabra]. F2006	394
	[Letter to Haeckel on the origins of Darwin's theory of evolution]. F1916	396
<b>1876</b>		
	[Letters to J. Torbitt on potato propagation]. F1978	397
	[Evidence given to the Commission on the <i>practice of subjecting live animals to experiments</i> ]. F1275	398
	Cherry blossoms. F1772	399
	Sexual selection in relation to monkeys. F1773	400
<b>1877</b>		
	[Letter on Stock Dove]. F1951	403
	Holly berries. F1774	403
	[The scarcity of holly berries and bees]. F1775	404
	To members of the Down Friendly Club. F1303	405
	Fertilisation of plants. F1780	406
	Testimonial to Mr. Darwin—Evolution in the Netherlands. F1776	406
	Scrofula and in-breeding. F1972	407
	[Memorial] Zoology of the 'Challenger' Expedition. F2003	408
	Note to Mr. Francis Darwin's paper. F1777	409

Cambridge University Press

978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883

Edited by John van Wyhe

Frontmatter

[More information](#)

xii

*Contents*

A biographical sketch of an infant. F1779	409
[Memorial to Earl Carnarvon on the proposed South African Confederation by the Committee of the Aborigines Protection Society]. F1926	416
The contractile filaments of the teasel. F1778	417
Fritz Müller on flowers and insects. F1781	418
Growth under difficulties. F1782	419
<b>1878</b>	
[Report of conversation]. Mr. Darwin at Down. F1999	420
[Extracts of letters on potato cultivation]. F1979	421
Prefatory letter. In Kerner, <i>Flowers and their unbidden guests</i> . F1318	421
Transplantation of shells. F1783	422
[Memorial to the Vice-Chancellor respecting the Examination in Greek in the Previous Examination]. F1939	423
<b>1879</b>	
Fritz Müller on a frog having eggs on its back—on the abortion of the hairs on the legs of certain caddis-flies, &c. F1784	424
Rats and water-casks. F1785	426
[Extract from a letter to Grant Allen]. F2004	426
[Report of conversation]. Lettres de Londres: X. F2000	426
<b>1880</b>	
[Letter to Samuel Butler on <i>Kosmos</i> and <i>Erasmus Darwin</i> ]. F1992	427
Darwin's reply to a vegetarian. F1984	428
[Letter on purportedly carnivorous bees]. F1953	428
Fertility of hybrids from the common and Chinese goose. F1786	429
The sexual colours of certain butterflies. F1787	430
The Omori shell mounds. F1788	432
Encouragement of original research: the Darwin prize. F1993	433
Sir Wyville Thomson and natural selection. F1789	433
[Letter of thanks to the Yorkshire Naturalists' Union]. F1969	434
Black sheep. F1790	434
<b>1881</b>	
[Letter on the expression of the eye]. F1994	435
[Extracts from two letters on the drift deposits near Southampton]. F1351	436
[Letter on subsidence in the Pacific]. F1952	437
Movements of plants. F1791	438
[Letter to Emily Talbot]. Social science.—Infant education. F1995	439
Mr. Darwin on vivisection. F1352	441
Mr. Darwin on vivisection. F1793	442
The movements of leaves. F1794	443
[Letter to G. E. Mengozzi on design in nature]. F1970	445
Inheritance. F1795	446
Rolleston memorial. F1957	448
Mr. Darwin on Dr. Hahn's discovery of fossil organisms in meteorites. F1929	449

Cambridge University Press  
 978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883  
 Edited by John van Wyhe  
 Frontmatter  
[More information](#)

<i>Contents</i>		xiii
Mr. Darwin on mosquitoes. F1948		450
Leaves injured at night by free radiation. F1796		450
The parasitic habits of <i>Molothrus</i> . F1798		451
Mr. Charles Darwin and the defence of science. F1799		452
<b>1882</b>		
Prefatory notice. In Weismann, <i>Studies in the theory of descent</i> . F1414		452
The action of carbonate of ammonia on chlorophyll-bodies. F1801		453
The action of carbonate of ammonia on the roots of certain plants. F1800		470
On the dispersal of freshwater bivalves. F1802		486
Preliminary notice. In Van Dyck, On the modification of a race of Syrian street-dogs by means of sexual selection. F1803		488
<b>1883</b>		
Prefatory notice. In Müller, <i>The fertilisation of flowers</i> . F1432		490
<i>Bibliography</i>		493
<i>Index</i>		516

Cambridge University Press

978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883

Edited by John van Wyhe

Frontmatter

[More information](#)

## Foreword

The significance of Charles Darwin as a maker of present times has never been more evident than in the bicentennial of his birth. *On the Origin of Species*, first published a century and a half ago and continuously in print ever since, transformed the centuries-old debate about the history and origins of living beings. That book, and his other volumes on evolution by natural selection, were highly significant contributions to the intellectual, biological and theological revolutions of nineteenth-century Britain. And Darwin also became one of the most famous scientists of his day, a Victorian celebrity whose work even in his own lifetime was regarded as a foundation stone for the modern world, not least for the manner in which his writings changed the way human beings thought about themselves and their own place in nature. There can be no doubt about the worldwide significance of his impact. Yet he was also a country gentleman pottering around his garden. He was an invalid plagued by mysterious disorders. He was a traveller, husband, father, friend, and employer, as well as a remarkable thinker. Above all else, however, Darwin was an investigative naturalist. He loved to explore the quietly complex phenomena of living organisms or ponder the effects of geological processes, either in the localities he knew best around his country home in Kent, or ranging widely through the books he read in the evenings. Small details caught his attention. Sometimes he would hurry out to his greenhouse to begin an experiment that might test a statement that had recently come to hand. Or he might turn to friends and relations for verification. Always, his mind was alert to the tiny fact, the unobserved point that might contribute to his larger insight into the living world. This trait was evident in Darwin's character from very early on, and still charms readers today. Just before the *Beagle* voyage took place, his uncle Josiah Wedgwood called him 'a man of enlarged curiosity'. The description fitted him well throughout a long and active life.

This comprehensive collection of articles, essays, questions, comments, and printed notes by the great naturalist presents a remarkable record of Darwin's 'enlarged curiosity'. To be sure, Darwin published a number of lengthy books, which he viewed as the core of his literary output. Yet his shorter publications reflect many of the most significant aspects of his life's work. Among them are some of the letters written during the *Beagle* voyage – issued by his mentor John Stevens Henslow as a pamphlet for private circulation – that gave the London scientific world a tantalizing glimpse of Darwin's findings of fossil bones and hitherto unknown creatures. Upon his return, Darwin began immediately submitting his

Cambridge University Press

978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883

Edited by John van Wyhe

Frontmatter

[More information](#)

work to the scrutiny of scientific colleagues, publishing his work in the burgeoning range of monthly and quarterly scientific periodicals. These early articles announced his theory of the formation of coral reefs and made public his ambitious analyses of global uplift and subsidence. His first major paper, in the Royal Society's *Philosophical Transactions*, was on the much-discussed Parallel Roads of Glen Roy in the Scottish Highlands, a series of linear terraces that had puzzled naturalists for decades. Although Darwin later regarded this paper as 'great failure', it reveals many aspects of his methods of theorizing during the most creative period of his life. Darwin continued to publish substantial essays and articles, often in later years as precursors to longer books. The most famous of these, also included here, is the joint presentation (with an essay by Alfred Russel Wallace) of the theory of natural selection delivered before the Linnean Society in 1858.

The greatest revelation of this volume, however, is in bringing together all of Darwin's known short notes, queries, commentaries, and other occasional contributions to Victorian periodicals, newspapers and other ephemeral publications. These range from incidental comments in Victorian gardening magazines to questionnaires issued to willing friends and relatives. They include notes on microscopes, hedgehogs, honeybees, dogs' feet, lizard's eggs, cherry blossoms, and an edible fungus found in Tierra del Fuego. Anyone interested in Darwin owes John van Wyhe a large debt of gratitude for providing authoritative texts of this diverse material. Building on and correcting the work of previous scholars, this volume contains some eighty items unknown or overlooked when Darwin's papers were last brought together by Paul Barrett in 1977, including over thirty discovered by van Wyhe himself. It is remarkable, in any field, to have so much material for a major author made freshly available.

In these occasional writings, it could be said, Darwin shows us himself. At one level, they display his mind at work. Here we can see the individual problems that preoccupied him, on the one hand ranging over an extraordinary variety of topics and on the other providing sustained evidence of genuine intellectual penetration. We can see Darwin catching hold of a problem and reformulating it in new ways, either as a question that might be answered by the observations of some other naturalist or presenting the results of some recent work that open up further questions for research. In a larger sense, these notes can also tell us about the making of a scientific fact – the processes of research and observation, the questions and experiments, the validation and authentication through further inquiry. Indeed, seeing Darwin's smaller publications *en masse* in such a fashion opens the door for a re-evaluation of the way that science was made in the years before large laboratories existed. Darwin's shorter publications show us the heart of the scientific process at a time that is often characterized as the starting point for its modern consolidation.

At another level, too, these shorter publications are true to the man behind the theories. Much of the rationale in drawing these publications together is that they show how varied and regular a contributor Darwin was to Victorian periodicals. It is a revelation to see how persistently he used the format of minor publication to elicit comment and feedback, how he cultivated a wide range of contacts, many of whom he did not know except through the columns of natural history magazines. This again speaks to the way that natural history was pursued in Victorian Britain. Few such contributors to journals became as famous

Cambridge University Press

978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883

Edited by John van Wyhe

Frontmatter

[More information](#)*Foreword*

xvii

as Darwin. Many were academic naturalists, established experts, landowners, well-known animal or plant breeders, or knowledgeable amateurs who vigorously pursued topics of mutual concern in an increasingly wide variety of illustrated magazines, journals and popular books. Here Darwin comes among them as an equal, as a reader intrigued by bees' combs, the tendrils on climbing plants, or the transmission of wing markings in domesticated pigeons. Here he could broadcast his inquiries to a community of knowledgeable experts. More than this, the geographical reach of the nineteenth-century natural history community was startlingly broad. The international scope of these shorter publications stretches beyond Britain to Europe and the wider world, for Darwin's intentions were global in scale. He eagerly made use of the extended domain of British colonial institutional structures and sought out personal links in key locations. From the closely packed columns of popular natural history magazines to the short pamphlets that he had printed up at his own cost for circulation, Darwin appears as a regular and spirited contributor to Victorian natural history. All these features reveal him as the man we have always suspected, but never fully seen in print.

Janet Browne

Jim Secord

Cambridge University Press

978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883

Edited by John van Wyhe

Frontmatter

[More information](#)

## Introduction

Charles Robert Darwin (1809–1882), the great English naturalist and geologist, changed forever our understanding of the world and our place within it. Many of his contemporaries regarded him as the greatest living man of science of their own and perhaps of any age. Some used the word ‘revolution’ to describe the profound alteration they believed Darwin effected in scientific knowledge. He synthesized many of the already sophisticated sciences of his day from geology, palaeontology, zoology, embryology, physiology, taxonomy, anthropology, botany, psychology and more. After Darwin’s death countless obituaries and biographical accounts continued to laud him as the one figure who had solved the greatest puzzles of life on earth.

Against this it seems hardly relevant that many of them did not, or did not fully, accept Darwin’s stress on natural selection as the primary mechanism for evolution or ‘descent with modification’. What Darwin did achieve was to convince the international scientific community and their descendants for the succeeding century and more that all the kinds of living things on earth are derived from common ancestors. The single branching genealogical tree of life is Darwin’s vision.<sup>1</sup> This explanation unlocked the basic pattern of past and present life on earth, and was consistently attributed to Darwin. It took until the ‘new synthesis’ in the 1930s to fully seal the role of natural selection.<sup>2</sup>

Yet we must always strive to envisage Darwin not as a timeless ideal genius but as a real person living in his own time and context. This is all the more difficult because his world has largely vanished with the lapse of time. Sometimes particular facts can help to imaginatively reconstruct the richness of his world. Darwin was a wealthy and respected member of the nineteenth-century English gentry. He belonged to gentlemen’s clubs, scientific societies and was treasurer of the local village savings society. He read *The Times*, cheap romantic novels, especially if they had beautiful heroines and the works of George Eliot and Charles Dickens. He interacted with a wide range of his contemporaries from fellow Cambridge undergraduates (many of them noblemen), other elite men of science and their families, South American Indians, pigeon fanciers, as well as servants in the home, labourers in the field and local villagers and clergymen. He invested in the new railways and played with his children and dogs. He went for daily walks in the countryside near his rural home, Down House, in Downe, Kent, about fifteen miles from the centre of London. He corresponded with thousands of individuals about his scientific interests. Many of his letters appeared



Cambridge University Press

978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883

Edited by John van Wyhe

Frontmatter

[More information](#)

in newspapers and magazines. Darwin was only one man amongst a large international scientific community. This meant that in addition to profiting from the reference works and publications of other naturalists, his science was also a dialogue with his peers.

Darwin's views are most widely known from his books. The *Origin of Species* is often referred to as one of the most important and famous books ever written. Similarly his *Journal of Researches* (now commonly known as *Voyage of the Beagle*) and *Descent of Man* are very well known. Darwin's adult life revolved around a series of researches that culminated in scientific publications. He published sixteen books, or twenty depending on how we count them. All have been reprinted, some many times, and are still in print; consequently, they are widely available.

Yet there were at least 244 unique shorter publications of Darwin's writings during his lifetime. These are scattered amongst many now rare newspapers, magazines, journals, offprints and books and pamphlets by other authors. No library possesses all of them. This book brings these scattered productions of Darwin's pen together between the covers of a single volume for the first time.

It is impossible to understand Darwin's life and work from his books alone. They are the milestones,<sup>3</sup> but there is much valuable material in the stepping stones dotted between them. After his first words appeared in print as a student at Christ's College, Cambridge, in 1829, more appeared in an essay, article, letter to an editor, or other brief publication every following year of his life except 1833–4 and 1854. The shorter publications represent an important part of the Darwin visible to the Victorian public. They reveal, if possible, an even wider variety of his scientific interests and abilities. They also reveal his ever present sense of humour. Darwin was not a frightened recluse, but a well-liked family man of independent means obsessed with scientific puzzles. The shorter publications show how his curiosity to understand the natural world continued to his final days. In his very last publications he cited the latest international scientific works of 1882.

Contributions by Darwin appeared in dozens of periodicals, not just scientific journals but newspapers, gardening, horticultural and country sporting magazines. A basic analysis of the shorter publications shows an early mixture of geological and zoological publications until the mid-1850s. From the mid-1840s botanical items became more numerous although they are absent from the 1846–1854 barnacle research period. The zoological items appeared more or less continuously throughout his life. Many deal with Darwin's interests in the natural means by which species may become distributed about the globe. Both before and after the publication of *Origin of Species* Darwin tended not to discuss the ultimate aims behind his queries. There are roughly 30 geological, 100 zoological and 100 botanical items. Another extremely loose category might be called social items such as the letter defending missionaries, signed memorials on the British Museum's collections, domestic gardening issues, donations to charities and opposition to cruelty to animals. Later, after the *Origin of Species* and *Descent of Man*, items answering critics became more numerous. The second paragraph of Darwin's 1863 letter in the respectable *Athenaeum* (p. 334 below) gives one of his best concise summaries of the evidence for his theory of evolution. The shorter publications are almost silent on politics and religion.

Cambridge University Press  
978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883  
Edited by John van Wyhe  
Frontmatter  
[More information](#)

*Introduction*

xxi

The first collection of Darwin's papers was published by Paul Barrett in 1977. Although it has performed valuable service for thirty years, a more complete collection is long overdue. Many new shorter publications have been discovered since 1977. The editors of the *Correspondence* have uncovered most of these and new items are still occasionally found. Thirty-three items were discovered during the preparation of this book and in the course of creating and editing *The Complete Work of Charles Darwin Online* (<http://darwin-online.org.uk/>) [hereafter *Darwin Online*] – some shortly before this volume went to press. With the increasing range of historical publications available electronically, many more previously unrecorded Darwin publications will no doubt be found. These can be added to *Darwin Online* if their discoverers will send me copies or references.

Barrett's *Collected Papers* included only 153 items and omitted parts of the original publications such as the exact titles, Darwin's salutation, valediction and dates of letters. There were also several errors such as incorrect publication dates, missing words and incomplete bibliographical details.

The present work brings together all known Darwin publications and shorter than book-length printed items during his lifetime, minus nine omitted for lack of space. The single item from 1883 is included because it is both short and Darwin intended it for publication. This volume therefore contains the majority of Darwin's publications, in terms of number, including his first and his last publications.

The year 2009, the 200th anniversary of Darwin's birth and the 150th anniversary of the publication of the *Origin of Species*, seems an appropriate time to publish the shorter publications in print. These documents are all available in *Darwin Online*. There are a number of reasons to publish them as a book. Many people prefer to read and study a physical volume rather than reading from a screen or printouts. With an unforeseeable future of ever shifting technological landscapes before us, a printed volume remains reassuringly permanent. And print still reaches different audiences who cannot, or do not, use the internet.

A publication, following the criteria of Darwin's great bibliographer R.B. Freeman, is anything printed during his lifetime that was: written by Darwin, signed by Darwin, or a quotation of his unpublished words. Although a few items were privately printed, and therefore not technically published, they have traditionally been counted amongst Darwin's publications and are also included here. Reprints, quotations from his published works and foreign translations are not included.

Lack of space has forced me to omit a few of Darwin's longer essays but in most cases these later appeared in some of his books and therefore may be treated differently. These, and several other associated passages such as lists of co-signatories on memorials signed by Darwin, or very lengthy items only signed by Darwin are omitted for lack of space. The omitted text amounts to 107 000 words. All omitted items are available on *Darwin Online*. The shorter publications included here total about 240 000 words, which, together with the notes and 11 000 word bibliography, are as much as could be included within a single volume.

Barrett's collection was largely un-annotated. This volume, for the first time, identifies, where possible, all persons and publications cited or mentioned by Darwin. Most of these

have remained unidentified since Darwin's day. Others remained elusive and as every editor knows there comes a time when further fruitless searching must be given up in the interest of completing the whole. The bibliography is therefore a supplement to works read and referred to by Darwin. Combined with the bibliographies of the *Correspondence*, *Natural Selection* and the *Marginalia* a complete bibliography of the works cited and used by Darwin is approached.

Darwin's shorter publications have been arranged chronologically according to their given publication dates. Items dated no more specifically than by year are listed at the beginning of that year. The omitted items are given a full reference at the appropriate point to avoid obscuring their place altogether.

### *Editorial policy*

I have endeavoured to reproduce the original documents faithfully. Spelling, punctuation, even apparent misprints have been preserved. Original editorial comments in Darwin's publications are retained when space permits.

The original pagination has been preserved between vertical lines, e.g. [195]. Darwin's or original editorial notes are given as footnotes. New bibliographical references are cited in author–date format; complete references can be found in the bibliography. Multiple items by the same author in the same year are distinguished with the addition of letters, e.g. 1850a, 1850b, etc. Darwin's publications are indicated in a different and somewhat unconventional, but hopefully more useful, system than a series of arbitrary abcs – which would have to be changed when any new interceding items are discovered. Instead Darwin's shorter publications are cited as author–date followed by the Freeman or 'F' number (e.g. Darwin 1840, F1656) according to the standard bibliography begun by R. B. Freeman. These numbers are unique identifiers associated with each publication. The definitive edition of the bibliography of Darwin's writings is published on *Darwin Online*. Freeman assigned new numbers in his second edition (1977). When preparing the new online edition based on his work I decided to freeze Freeman's numbers which had stood for so long and which are so widely cited. Additions to the bibliography are assigned new numbers consecutively from F1806 onwards. The numbers, though often running continuously and chronologically, should be regarded as arbitrary. For items included in this book, the page number is provided in parentheses after the 'F' number.

I have taken no notice of items at some point recorded as Darwin publications but which do not meet the above criteria. I have retained a few exceptions, as, for example, the report of Darwin's remarks on Gould's description of the Galapagos finches, which are brief and of particular significance.

### *Annotations*

Space restrictions permit only minimal notes. I have aimed at making the material as accessible as possible for a wide range of readers. New editorial notes are provided

as endnotes after each of Darwin's shorter publications and in brackets when in Darwin's footnotes.

All persons mentioned have been identified, when possible, with a note at their first occurrence and only subsequently when clarity required. Surnames can be found at any time via the index. The notes are meant merely to identify the individual and therefore usually provide only dates and a statement of profession or activity and current role or office. Titles are ignored. The *Correspondence* biographical register, Freeman's *Companion* or other reference works should be consulted for more detail. Throughout the notes the abbreviation 'CD' is used for Charles Robert Darwin, 'DAR' refers to the Darwin Archive at Cambridge University Library, 'CCD' refers to *The Correspondence of Charles Darwin*, and 'DO' refers to *Darwin Online*. I have followed the standard abbreviations of Darwin's and other key works used by the *Correspondence*. These can be found in the bibliography alphabetically according to the abbreviated title, rather than by author name. Editorial comments in the texts are enclosed in square brackets. Any original square brackets have been changed to parentheses.

Publications mentioned or cited by Darwin are identified, when possible, at their first occurrence and only subsequently if clarity seemed to require it. The aim was to make the original text intelligible and useful but not to note every relevant secondary source. In addition to the lack of space this would also lead to the volume perhaps becoming prematurely dated. I have also noted items that were noted by Barrett 1977, even when such points are not otherwise noted in this volume, for readers who do not possess both works. Items only signed by Darwin are more sparsely annotated. Many of the published letters in this volume have already been masterfully edited and published in the *Correspondence*. It would be futile to attempt to improve on their work, even though such printed items also have a place in this volume. In such cases the first endnote includes a reference to the item's place in the *Correspondence* which in most instances provides more detailed annotations than have been attempted here.

No doubt some mistakes and inconsistencies remain. The task has been, at times, overwhelming and I am keenly aware of my inadequacies. It ought, perhaps, to have been undertaken by a team of researchers. I would be grateful to be informed of mistakes and any unidentified Darwin publications fitting the above criteria.

---

<sup>1</sup> See Darwin 1863, F1730 (p. 506) and Hodge 2005.

<sup>2</sup> Mayr 1982.

<sup>3</sup> *Autobiography*, p. 136.

Cambridge University Press

978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883

Edited by John van Wyhe

Frontmatter

[More information](#)

## Acknowledgements

In preparing this volume I have, to paraphrase Darwin, incurred a heavy, but pleasant load of gratitude to many individuals and institutions. It is a great pleasure to thank them here. The Arts and Humanities Research Council and the Centre for Research in the Arts, Social Science and Humanities (CRASSH) at the University of Cambridge supported my work during the latter part of the gestation of this volume. Earlier phases were conducted while I was employed by the National University of Singapore, the Correspondence of Alfred Russel Wallace Project at the Open University and the History of Ideas Department at the University of Aarhus, Denmark.

I owe a very great debt to Jim Secord and Janet Browne whose generous support and guidance have made this and so much else possible. Words are not sufficient to express both how indebted I am to them and my great respect and admiration. It is an honour to have their contribution to this volume. Sue Asscher, associate editor for *Darwin Online*, has (in addition to much other work) proof-read and corrected almost every one of Darwin's shorter publications for the website and thereby made a voluntary contribution that is difficult to exaggerate. Her tireless efforts and painstaking attention to detail made it an honour to work with her. Not only I, but the many readers of *Darwin Online*, owe her a great deal of gratitude. Kees Rookmaaker, research associate with *Darwin Online*, made an enormous contribution to this work both in terms of research, checking notes and acquiring many copies of Darwin's shorter publications from around the world. Some of them, I must apologize, more than once when my sometimes out-of-date lists of references were repetitive. He has also been a constant source of advice and encouragement and it has been my privilege to work with him. Gordon Chancellor kindly checked the notes for the many geological and *Beagle* items and offered many helpful suggestions and composed a few endnotes (always attributed). His enthusiasm and generously shared scholarship were a great benefit for which I am very grateful. There are too few such scholars who combine, as he does, daunting knowledge of the subject, infectious enthusiasm and the greatest possible kindness and readiness to help. Both this book and I owe a very great debt to Duncan Porter who kindly, even courageously, not only checked the endnotes of the many botanical items, but read over all of the botanical shorter publications themselves and provided many suggestions and corrections. His generous assistance

Cambridge University Press

978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883

Edited by John van Wyhe

Frontmatter

[More information](#)*Acknowledgements*

xxv

on many points, unparalleled knowledge and expertise are a very great contribution for which I am particularly grateful. The editors of the *Correspondence*, especially Shelley Innes and Alison Pearn, provided much important assistance identifying a mistaken letter on the online versions, answering many queries and providing details from the unpublished correspondence. Rosemary Clarkson kindly helped looking into queries and sent photocopies of rare items. Samantha Evans helped with details on preparing the final print volume. I am especially indebted to Jim Secord, Director of the Darwin Correspondence Project, for his enormously kind and helpful commitment to promote Darwin scholarship and for making details of the unpublished correspondence available to me, though unfortunately there was not enough time to fully utilize them in this volume.

Nicholas Jackson translated the Darwin letter in Italian (F1970) at very short notice. David Butterfield and David Sedley kindly translated the surrounding Latin paragraph from Linnaeus (F350). Tori Reeve, the Curator of Down House, helpfully showed me Darwin's copies of the books by Otto Hahn. Daniel Glaser helpfully took the trouble to pass on an unrecorded Darwin publication (F2006). George Beccaloni kindly looked over some of the entomological items and offered helpful advice.

I have received assistance from many others who are no less deserving of thanks here including Cordula van Wyhe; Patrick Zutshi, Adam Perkins and Godfrey Waller of Cambridge University Library; Tim Eggington and Dawn Moutrey of the Whipple Library, Cambridge; Judith Magee and Lorraine Portch of the Natural History Museum, London; Candace Guite, Colin Higgins, and Ann Keith of the Library of Christ's College, Cambridge; Sarah Humbert of the Earth Sciences Library, Cambridge; New College Library, Edinburgh University Library; The University Museum of Zoology, Cambridge; the Rutherford B. Hayes Presidential Center, Spiegel Grove, Fremont, Ohio, USA; Alexandra Caccamo, Librarian at the National Botanic Gardens, Dublin; Heinz Alfred Gemeinhardt of the Staatsarchiv Reutlingen; the Library of the National University of Singapore; Martin Rudwick; Tom Glick; Angus Carroll; The Master, Fellows and Scholars of Christ's College, Cambridge; the Sedgwick Museum of Earth Sciences, Cambridge; English Heritage (Darwin Collection at Down House) and the Darwin, Keynes and Barlow families. Gordon Chancellor, Jon Hodge, Jim Secord and Gregory Radick provided helpful suggestions for the introduction. Corrections or suggestions for the online versions of the texts or notes were kindly sent by Andrew Sclater, Marsha Richmond, J. David Archibald, Rebecca Stott, David Allan Feller, Shelley Innes, Randal Keynes, John S. Wilkins, George Beccaloni and David Clifford. I apologize to any whose names I have inadvertently omitted.

I am grateful to the many scholars whose works I have consulted and relied upon in research for this volume even if a specific mention has not been made. My greatest debt is to the *Correspondence*, their *Calendar* and database of persons and extended bibliography are indispensable aids. It would have been impossible to complete this work in time without this massive mountain of Darwin scholarship. I am also indebted to the workers behind online text collections such as Google books, The Internet Archive, Making of America, JSTOR, Gallica and many others which made a trip to the library on countless occasions unnecessary

Cambridge University Press  
978-0-521-88809-7 - Charles Darwin's Shorter Publications, 1829-1883  
Edited by John van Wyhe  
Frontmatter  
[More information](#)

---

xxvi

*Acknowledgements*

as a work could be found online or vague references could be identified by electronic searching that would never have been otherwise identified.

I have benefited enormously over the years from conversation and correspondence with James Moore, Randal Keynes, Sandra Herbert, Marsha Richmond, Jim Secord, Janet Browne, Richard Keynes, Fred Burkhardt, Adrian Desmond, Aileen Fyfe, Frank Sulloway, Mario di Gregorio, Nick Gill, Pietro Corsi, Rebecca Stott, Robert Olby, Duncan Porter, Jon Topham, Ludmilla Jordanova, and Peter Kjærgaard.

For permission to reproduce unpublished material in their possession I am grateful to William Huxley Darwin and the Syndics of Cambridge University Library. The 'appeal' woodcut is reproduced by kind permission of the Master and Fellows of Christ's College, Cambridge. Cambridge University Press gave permission to reproduce passages from the *Correspondence*. I would like to repeat my thanks here to The Charles Darwin Trust and Mary Whitear for permission to reproduce Freeman's *Bibliographical Handlist on Darwin Online*.

Finally I wish to thank my editor at Cambridge University Press, Jacqueline Garget, and the team at the Press who helped with the illustrations and typesetting, two anonymous referees for helpful suggestions and Margot Levy for her superb index.