

4-21-2001

## Darwin Remembers: Recollections of a Life's Journey

Floyd Sandford

*Let us know how access to this document benefits you*

Copyright ©2001 Floyd Sandford

Follow this and additional works at: [https://scholarworks.uni.edu/ias\\_docs](https://scholarworks.uni.edu/ias_docs)

 Part of the [Ecology and Evolutionary Biology Commons](#)

---

### Recommended Citation

Sandford, Floyd, "Darwin Remembers: Recollections of a Life's Journey" (2001). *Iowa Academy of Science Documents*. 104.

[https://scholarworks.uni.edu/ias\\_docs/104](https://scholarworks.uni.edu/ias_docs/104)

This Miscellaneous is brought to you for free and open access by the IAS Miscellaneous at UNI ScholarWorks. It has been accepted for inclusion in Iowa Academy of Science Documents by an authorized administrator of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

**Offensive Materials Statement:** Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

*Darwin  
Remembers...*

*Recollections  
of a  
Life's Journey*

*April 21, 2001*

*Annual Meeting  
of the  
Iowa Academy of Science*

*Hotel Fort Des Moines  
Des Moines, Iowa*

# *Darwin Remembers*

*By Floyd Sandford*

**Scene:** The study of Charles Darwin at Down House near the small village of Downe in Kent, England, 16 miles south of London in the afternoon of a day in October 1881

## *Note*

*Today's performance will last approximately 60 minutes with no intermission.*

## **Acknowledgments**

The author/actor is grateful for the help or advice of others who assisted in the project, or in productions of "Darwin Remembers," past and present.

Mr. Sandford expresses his appreciation to the following persons for their assistance, advice and/or encouragement: Coe College, Academic Dean Laura Skandera-Trombley, Humanities Iowa and the National Endowment for Humanities, Candace Pufall, Michael Pufall, Randy Susevich, Jean Newkirk, Ann Struthers, Sharon Sandford, Susan Sandford, Tiffany Edleblute, Leo and Lorrene Sheumaker, Lee Schneidermann, Jim Miller, Marsha Evenson, Margaret Haupt, Mindy Portwood, Diane Bradbury, Amy Wheeler, Ruth Browning-Nance, Rich Adkins, Carole Butz. Finally, thanks to David McCalley for inviting me to give the performance and for making the local arrangements.

# The Life of Charles Darwin

Charles Robert Darwin, the scientist, produced a prolific array of work during his lifetime. Of his 19 books, his most famous and historic work *On the Origin of Species* was published in 1859 when he was exactly 50 years old. There has been much speculation as to why he waited so long to publish his ideas on the origin of species following the return from his illuminating scientific voyage in 1836.

Darwin was born in Shrewsbury, England, on February 12, 1809, sharing the same birthday with Abraham Lincoln. His father Robert was a wealthy physician with one of the largest medical practices outside London. His paternal grandfather Erasmus was both a physician and a celebrated nature writer. Darwin as a young boy developed an interest in natural history but started his advanced schooling at Edinburgh in medicine, a subject he soon learned to detest. Later at Cambridge, where he went to prepare for a career in the clergy, he showed no interest in his theological studies, but became acquainted with a botany professor, the Rev. John Henslow, who was destined to become his mentor and to have a profound effect on his life. It was Henslow who encouraged Darwin, following his graduation from Cambridge, to take an extended sea voyage and exploration of the world outside of England. Darwin took advantage of the opportunity—without pay—and became expedition naturalist and gentlemen's companion to Capt Robert FitzRoy, on the HMS Beagle. The intended three-year voyage stretched to five years, and Darwin had wonderful experiences as he circum-navigated the world, spending over three years of the five exploring the geology, flora and fauna of South America.

Upon his return to England he arranged his notes and read voraciously in all fields of science, filling notebook after notebook with his insights. Finally, in 1838, he put his ideas together in what eventually became his theory of evolutionary change and the origin of species by a process of natural selection. He expanded these ideas into a 35-page paper and then into a longer 230-page paper, in 1842 and 1844, respectively. However, he did not publish his ideas at this time, apparently intending to keep working to produce a larger, more impressive book.

In 1839 he married his cousin Emma Wedgwood. They had 10 children together, seven surviving to adulthood, and lived a long and happy life together, untouched by the slightest hint of poverty or scandal. After living several years in London they moved to a country house at Downe in Kent about 16 miles from the outskirts of London. He never again left the British Isles and rarely traveled far from Down House.

His tragedies were those shared by some of his contemporaries—the premature deaths of three of his children and poor health. For Darwin, personal health became a major life influence as he was plagued by a chronic illness whose symptoms rarely left him for a day.

*On the Origin of Species* provides copious evidence and direct suggestions for practical research. Darwin's theory of natural selection is not one of local adaptation only. It does not assume the very human notion of "progress" nor does it presume, in terms of biological types, that one or the other is "better," any more perfect or improved, or any more guaranteed of persistence over time. As if this denial of inherent progress or perfection were not enough, Darwin also introduced the idea of "randomness" and the non-necessity of assuming any divine overseeing Creator as the driving force behind the variety of types in the natural world.

The idea of evolution did more than simply contradict the Genesis story; it raised the specter of a purely materialistic cosmos which was disturbing to Victorian society. Although some people could reconcile the facts of evolution with their religious beliefs, others had their faith shaken. One of these was Alfred Lord Tennyson, who published a poem "In Memorium" in 1850 which became a popular poem of the Victorian era. In mourning the death of a friend, Tennyson created a mood of despair by drawing from images of natural history, the debate over evolution, and the heartlessness of an "eat or be eaten" scenario of the natural world.

*Are God and Nature then at strife, that Nature lends such evil dreams  
So careful of the type she seems, so careless of the single life.  
Who trusted God was love indeed, and love Creation's final law –  
Tho' Nature, red in tooth and claw, with ravine shrieked against his creed.*

Tennyson's brutish view of nature, red in tooth and claw, was adopted by evolution's critics as being synonymous with Darwin's "struggle for existence."

One can imagine Darwin's surprise and the pain of his inner conflict when, after working for 20 years on his theory, he received a package from Indonesia in 1858 containing an essay written by the young English naturalist Alfred Russell Wallace containing an outline of a theory nearly identical to his own, which Wallace indicated was devised one night during a malarial fit. Although both men are credited with the theory of natural selection, priority for the idea of natural selection—the essence of the theory—cannot be denied to Darwin, as he had recorded his ideas to paper in 1838 when Wallace was still a teenager. *The Origin* was published in 1859 and became an instant best seller—and an instant source of controversy. Controversy continues to this day, although the notion of evolutionary change is now firmly established as a major paradigm of the natural sciences. In *The Origin* Darwin talks much about pigeons, dogs, beetles, and other forms of life but says nothing of man. Of humans, he only enigmatically says that "light will be thrown on the origin of man and his history." In subsequent editions Darwin revised the text to read "much light."

Darwin, of shy and retiring temperament, and plagued by poor health, did not seek out conflict or controversy, and demurred when occasions arose to discuss or debate his views in public. At the June 1860 public debate held at Oxford, with more than

700 persons crowded into a lecture room, Darwin was conspicuously absent. It was his longtime friends and supporters Joseph Hooker and “Darwin’s bulldog” Thomas Huxley who defended his views against the attacks of Admiral Robert FitzRoy, Richard Owen, and “Soapy Sam” Wilberforce, the Bishop of Oxford.

Altogether, Darwin wrote 14 books, in addition to four monographs on the taxonomy and biology of barnacles, and his narrative of the voyage of the *Beagle*. After Darwin had written down his ideas in his long paper of 1844 he was stricken with bouts of bad health and several tragedies in his personal life. He also spent eight years working on his barnacle monographs, an accomplishment which made him the world’s leading authority on barnacles. These events were responsible for some of his delay in writing his “big book” on natural selection.

In 1871 his book *The Descent of Man* was published, in which he argued that humans were no different from all other forms of life, and that we too, in our evolutionary history, have been influenced by the forces of natural selection. Then, in *The Expression of the Emotions in Man and Animals*, published in 1872, he dared to claim that most of our refined and most particularly human behavior—the expression of our emotions—also reflected our evolutionary past.

Darwin was not an atheist. He described himself as an agnostic, and it is likely that he retained a belief in some kind of personal God, although not a deity who, like some master puppeteer, took a direct and continuously intervening role in the evolutionary process and in human affairs. Throughout his life Darwin maintained a sense of deep humility and a concern for his fellow man, fully aware of the limits of science. Darwin was deeply affected by the death of his older brother Erasmus (“Ras”) in August 1881, and it is conjectured that his grief may have exacerbated the seriousness of his own poor health. In early 1882 he had several minor heart attacks. His condition worsened and on April 19, 1882, at 73 years of age, he died at Down House, after several hours of nausea and intense vomiting, symptoms of a chronic illness that bedeviled him for the last 40 years of his life. At his bedside, and attending to his needs, were his wife Emma, his daughter Henrietta and his son Francis. A widespread rumor circulated—facilitated by an evangelist by the name of Lady Hope who preached in Downe during the last years of Darwin’s life—that on his deathbed Darwin renounced evolution and declared himself a Christian. This story, totally contradictory to the nature of the man himself, is a falsehood, denied by his daughter Henrietta and those who knew him best and who were actually at his bedside during his last days. Darwin’s last words, spoken to his wife Emma, were in actuality “I am not in the least afraid to die.”

Darwin, and his family, wished for his burial in Down, in the village where he had spent most of his adult life. He requested a simple burial in a plain, rough-hewn, unadorned and unpolished coffin. But, his scientific colleagues convinced his family that he was due a greater honor, and it was the wish of Parliament that a person of his



stature be given a state burial. Accordingly, on April 26, 1882, Charles Darwin was laid to rest in Westminster Abbey in a fine polished coffin that one "could see to shave in," only a few feet away from the grave of Sir Isaac Newton.

His pallbearers included Alfred Russell Wallace and the two scientists who were his closest friends and staunchest defenders—Joseph Hooker and Thomas Huxley. The organist at Westminster Abbey wrote a special funeral anthem for the occasion, taking the text from Proverbs 3:13-17, which begins "Blessed is the man who finds wisdom and who gains understanding." As is often the case with hypocritical humans, many who ridiculed or cursed Darwin in life were full of kind words at his funeral. For those who knew him as the kind and modest man he was, their praise came from the heart. Said Huxley in his eulogy during the funeral services, "his was an intense and almost passionate honesty by which all his thoughts and actions were irradiated, as if by a central fire." Emma Darwin, his loyal and devoted wife, moved to Cambridge but returned to Down House during the summers for 14 more years until her death in 1896.

Both Darwin and his ideas were misunderstood by many during his lifetime, and much misunderstanding and confusion continues to this day. Darwin did not propose that the evolution of any species, including our own, was the result of a random accident. Changes occurring from one generation to the next are cumulative, typically gradual, and influenced by natural processes that are selective...but neither random or accidental. The evidences for evolution and a naturalistic origin of new species on this planet is overwhelming and scientifically convincing. Considering the scientific evidence for evolution by natural selection is one matter; whether one then draws their own conclusions about the existence or non-existence of a spiritual force in the cosmos is another matter entirely.

It is the modest hope of the author/actor that this play will shed a bit more light on the personality of Charles Darwin and the significance of his life and work.

*Down House: Down House and the Darwin Museum are located only a short walk from the quaint and charming village of Downe, amidst the rustic and picturesque Kent countryside, only 16 miles south from central London. In 1996 maintenance of the house and grounds was assumed by the conservation organization English Heritage. The house has been fully restored and can be viewed using a highly educational audio tour. Upstairs rooms have been converted to exhibitions of Darwin's discoveries, life, and family. Visitors can tour the grounds and walk on Darwin's Sandwalk. In nearby Downe one can visit the church of St. Mary the Virgin, c. 1290. The graveyard there is the resting place of Emma, Darwin's brother Erasmus, four of the Darwin children, and Joseph Parslow, Darwin's butler and personal friend for 40 years. The author has visited Down House and the village of Downe and can enthusiastically recommend it as a worthwhile day trip for any tourists visiting in the London area.*

*Floyd Sandford*

## The Life of Charles Darwin

In addition to the comments following, a separate page of program notes with information about the life and work of Charles Darwin is available for persons interested in knowing more. You are welcome to keep these pages of additional information if you wish but if you don't want to take them with you, please help promote the re-use of resources by placing your play program/program notes in the box provided.

The information presented in this play is factual. Much of the information was derived from Darwin's autobiography, edited and published shortly after his death by his son Francis.

The play is organized chronologically beginning with Darwin's early life and his historic voyage around the world on the H.M.S. Beagle as "gentlemen's companion" to the captain, Robert FitzRoy, and also as the ship's naturalist. It is known that Darwin and FitzRoy often had differences of opinion, and that their conversations became argumentative and heated on occasion. FitzRoy was known for his mood swings and volatile temper.

Darwin then recalls his life following his return to England, including his marriage to Emma Wedgewood and events leading up to the publication of *The Origin of Species* in 1859 and the subsequent controversy. One event was the historic confrontation at Oxford in 1860, between Samuel Wilberforce, the Bishop of Oxford, and the biologist Thomas H. Huxley, Darwin's most loyal and vociferous defender in public forum and debates. Darwin himself was not at the meeting. Much has been written about this meeting, but no verbatim transcript exists of the actual dialogue that occurred between Wilberforce and Huxley. The exchange between the two men lasted about an hour. A recollection by Huxley written years later, which also includes personal narratives of several other persons who were at the meeting, is the nearest and most complete accounting of the events that occurred. Huxley's memoirs give a good accounting of his actual statements but unfortunately the actual and vital words spoken by Wilberforce are lost to time. Some factual details of the debate are available in *Life and Letters of Thomas Henry Huxley*, Vol. 1, edited by his son Leonard Huxley, and published in 1900.

The actor recreates part of this debate in an imagined six-minute exchange between Wilberforce and Huxley in a longer version of the play, but not in today's abridged version.

*Floyd Sandford*



## **The Books and Monographs of Charles Darwin**

- 1839 *Journal of Researches into the Natural History etc.... (The Voyage of the Beagle)*
- 1842 *The Structure and Distribution of Coral Reefs*
- 1844 *Geological Observations on Volcanic Islands*
- 1846 *Geological Observations on South America*
- 1851 *A Monograph of the Subclass Cirripedia*
- 1851 *A Monograph of the Fossil Pedunculated Cirripeds of Great Britain*
- 1854 *A Monograph of the Sessile Cirripeds*
- 1854 *A Monograph of the Fossil Sessile Cirripeds*
- 1859 *On the Origin of Species*
- 1862 *On the Var. Contrivances by which British & Foreign Orchids are Fertilized by Insects*
- 1868 *The Variation of Animals and Plants Under Domestication*
- 1871 *The Descent of Man and Selection in Relation to Sex*
- 1872 *The Expression of the Emotions in Man and Animals*
- 1875 *Insectivorous Plants*
- 1875 *The Movements and Habits of Climbing Plants*
- 1876 *The Effects of Cross- and Self-Fertilization in the Vegetable Kingdom*
- 1877 *The Different Forms of Flowers on Plants of the Same Species*
- 1880 *The Power of Movement in Plants*
- 1881 *The Formation of Vegetable Mould through the Action of Worms*