

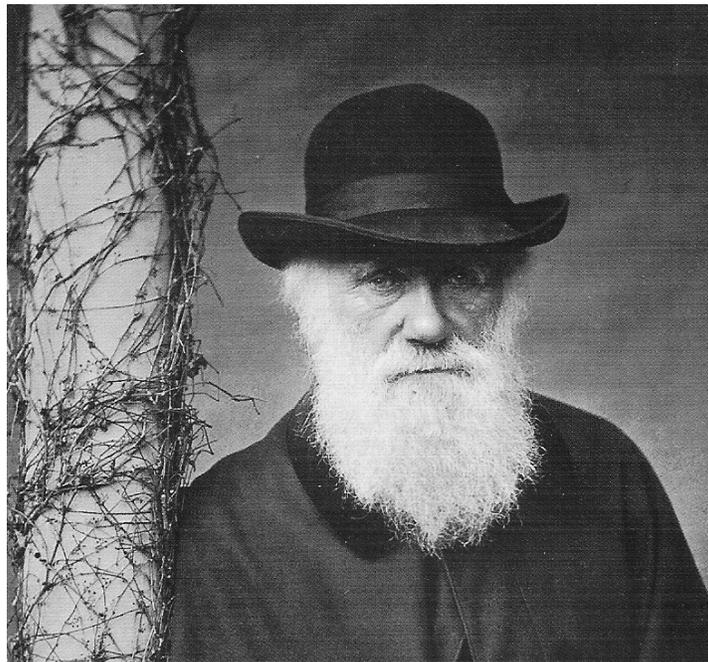
Worship resource material from the  
GA Worship Panel in collaboration with  
Rev. Margaret Kirk and York Unitarians

recognising the 200<sup>th</sup> anniversary of the birth of

# CHARLES DARWIN

1809 – 1882

born at Shrewsbury on 12th February 1809



“No blazoned banner we unfold –  
One charge alone we give to youth:  
Against the sceptred myth to hold –  
The golden heresy of truth.”

*from George William Russell (1867–1935)*

Charles Darwin was a man whose ideas about evolution deeply disturbed and offended Christians. He came from a tradition which valued and encouraged the spirit of free enquiry – one that had risen to the challenge of a new political and industrial age. His grandfather Erasmus Darwin published ideas about evolution 40 years before him and was a self-declared atheist. His grandfather-in-law, Josiah Wedgwood, embraced the Unitarian faith and kept the company of such radical Unitarian thinkers as Joseph Priestley.



## The Fruits of Heresy



## INTRODUCTION

The 200<sup>th</sup> anniversary of the birth of Charles Darwin, in February 2009, is a good time to celebrate his life and work. There is a major exhibition at the Natural History Museum in London entirely devoted to the importance of Darwin's theories and discoveries, and the national media in all its forms will be devoting many programmes to this theme. This worship pack has material for developing and planning your Worship Service.

You will find here background material on Darwin. This can be used as readings, with some of it appropriate for antiphonal reading among a number of voices. There are also 'chalice lighting' words, prayers and meditations, and some poetry that adds a lighter touch but maintains the theme. There isn't a sermon or address, but Dr. Simon Hardy's article on 'Intelligent Design' may well provide the basis for discussion and reflection on the basic themes.

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## PLANTING THE SEEDS

### Two Famous Grandfathers

**Erasmus Darwin (1731 – 1802)** was Charles' paternal grandfather. He was a physician based in Lichfield, an inventor, passionate about the construction of canals, a naturalist, a poet, the leading light of the Lunar Society and an atheist who described the Unitarian faith as "a feather bed to catch a falling Christian." In *Zoonomia* (1794) he developed radical ideas, based on his medical notes, about the link between mind and body and, controversially, what he believed were nature's constant transformations:

`Would it be too bold to imagine that in the great length of time since the earth began to exist, perhaps millions of ages before the commencement of the history of mankind...that all warm blooded animals have arisen from one living filament, which THE FIRST GREAT CAUSE endowed with animality, with the power of acquiring new parts...and thus possessing the faculty of continuing to improve by its own inherent activity, and of delivering down those improvements by generations to its posterity, world without end!` (*Zoonomia* 11 505 and *Essential Writings*)

**Josiah Wedgwood (1730 –1795)** was Charles' grandfather-in-law, famous potter and factory owner, canal entrepreneur and practising Unitarian. Both men were stimulated by industrial ideas, critical of orthodox views and sought the company of like-minded men,

many of whom were religious dissenters. The Lunar Society was so named as the men met on nights when there was a full moon, allowing them to ride home in safety and thus earning them the title `lunatics`. Its most famous member, and close ally of Wedgwood, was the Unitarian minister of New Meeting House, Birmingham, **Joseph Priestley (1733-1804)**. He provided a Unitarian minister to teach at the school attached to Wedgwood's factory outside Birmingham. Charles Darwin's father, Robert, was educated here, as were Josiah's son, Jos, and daughter Susannah (Charles' mother).

## **CHARLES DARWIN – a life in brief**

Born – 12<sup>th</sup> February 1809 at Shrewsbury. As a young child he was taken by his mother to the Unitarian Chapel in the High Street, where Rev. George Case was minister. Aged 8 he attended Rev. George Case's Day School. In 1818 he joined his brother Eras as a boarder at Shrewsbury School, shortly after his mother's death. He showed no aptitude for classical education, only collecting specimens and conducting chemical experiments in a garden shed.

His father was angered by his lack of progress at school and in 1825 sent him to study medicine at Edinburgh University. The university was open to dissenters who were barred from Oxford and Cambridge by the Thirty Nine Articles. Charles showed little promise for medicine, and was sustained by his enthusiasm for collecting marine creatures.

In 1828 he went to Christ's College Cambridge to study theology and become a clergyman. Despite some scruples about doctrine, he found the atmosphere more congenial, liked the notion of being a country cleric and above all enjoyed the opportunity to collect beetles. He passed his B.A. .... without Honours.



Darwin Memorial Plaque – Shrewsbury Unitarian Church

In 1831 he set off on HMS Beagle as naturalist and gentleman, and a traveling companion to captain Robert Fitzroy - the **most formative event of his life**.

The following five years led to meticulous, detailed observations of plants, animals, insects and rock formation recorded in field notebooks, his journal and letters home. He amassed an enormous collection of specimens, which were shipped back to Cambridge.

In 1836 he returned home with new purpose. He no longer considered going into the church and was recognized as a man of scientific authority, and approved of by his father. In July 1837 he began the secret writing about his ideas on the transmutation of species, later referred to as evolution.

In 1839 he married Emma Wedgwood. They lived firstly in London and then in the village of Down in Kent, with their two children, William Erasmus and Anne (Annie) Elizabeth. In 1842 he was elected a fellow of the Royal Society.

**January 11<sup>th</sup> 1844. An important date: the well-recorded and famous admission in a letter to his botanist friend Joseph Hooker: “ I have been now, ever since my return, engaged in a very presumptuous work...at last gleams of light have come and I am**

**almost convinced (quite contrary to opinion I started with) that species are not (it is like confessing a murder) immutable”**

In 1851 Annie's death at the age of 10 affected Darwin deeply and it is often suggested that he rejected Christianity thereafter. In 1858 an essay by the naturalist and collector Alfred Russell Wallace appeared to pre-empt Darwin's theory and led him to adopt the advice that he should publish first.

Thus on 24<sup>th</sup> November 1859 ***On the Origin of Species by Means of Natural Selection or the Preservation of Favoured Races in the Struggle for Life*** was published.

Whatever heresy Charles Darwin was responsible for, when he died on 18<sup>th</sup> April 1882, he was buried in Westminster Abbey. Thus his scientific achievement was properly acknowledged.

## **THE STRUGGLE TO GO PUBLIC**

Charles Darwin took a long time to go public with his theory of evolution by natural selection. His biographers are mostly agreed that fear of the consequences was the main reason for this. In the early 1840s the political and social scene was turbulent: attacks on the established church and clergy, a swell of atheist propaganda, thousands of workers on strike with Chartist demands. If he were to publish he believed his unorthodox ideas would be appropriated in the fight against privilege and class. This is not what he wanted. He was a respectable country gentleman with friends and family in the Church. In many ways he was deeply conservative with little sympathy for revolutionary behaviour.

It is suggested that he was pulled in two directions. His theory of evolution had a reforming, anti-establishment appeal. It is said that he thought like a Unitarian but felt for the Cambridge clerics who had helped to make his career and reputation. Above all else, he knew his theory de-throned a Creator God, challenged the most cherished beliefs of the Christian church and diminished the special status of humankind. Another source of conflict was his beloved wife Emma's Christian belief in salvation and fear that his views would prevent their union in an afterlife.

It is difficult for us, in the 21st century, to understand how disturbing a position this placed him in.

Much has been written of his anxiety when it came to letting his views be known, of the self-deprecatory remarks in some of his correspondence when he alluded to his ideas, and of the vomiting and weakness that afflicted him throughout his life, particularly when he needed to articulate and defend his views.

## **CHALICE LIGHTING WORDS**

We light our chalice in memory of Charles Darwin  
We light it to honour his questioning spirit  
and the questioning spirit of other men and women of science.  
We light it to celebrate his courage in speaking out for the truths he believed,  
and for his life's work –  
his steady commitment to a greater understanding of the mystery of living things.  
Above all, we light it in gratitude for his astonishment and sense of wonder  
for the very smallest of creatures.

## PRAYER

We are grateful for the open mind,  
the mind that moves ever forward in its search for truth and meaning.  
We are grateful for minds that are not cowed by conformity,  
that look with dispassionate grace on what life reveals -  
assuming nothing, cherishing what is new,  
exhilarated by discovery.

We are grateful for minds that re-assemble and question what has gone before,  
that seek for the connections that bring enlightenment,  
lives given to the task of bringing greater understanding,  
and that, whilst shaken by hostility and prejudice,  
continue to work for the golden heresy of truth. (Margaret Kirk)

## BEETLEMANIA (for children...of all ages!)

From being a young boy, Darwin was fascinated by creatures of all kinds, especially insects. So also is York Unitarian, Anneliese Emmans Dean. The following poems are from a selection of poems about insects written by Anneliese Emmans Dean whose photography and research on insects in her York garden, together with the writing of poems to accompany each of them, has led to performances in schools and festivals throughout the country.([www.theBigBuzz.biz](http://www.theBigBuzz.biz)) Her creative work has been recognized by the Entomological Society who awarded her with the Lesley Goodman Award in 2008 for advancing the education of the public in the knowledge, understanding and appreciation of insect physiology.

### On Archie

A professional assassin – beetle *Pterostichus madidus*

I don't like the limelight  
I don't like the glare  
Of publicity, cameras  
People who stare

I prefer undercover work  
Scuttling at speed  
Hot on the trail  
Of a nocturnal feed

Danger? No problem  
This, you'll have guessed,  
Is my very own purpose—built  
Bullet proof vest

I'm the scourge of the underworld  
Tough as they come  
Get in my way  
You'll end up in my tum. (Anneliese Emmans Dean)

On Charlie (You might sing this!)

An earthworm – common earthworm *Lumbricus terrestris*

Charlie is an earthworm, an earthworm, an earthworm  
Charlie is an earthworm  
He's long and thin and round.

Charlie is an earthworm, an earthworm, an earthworm,  
Charlie is an earthworm  
He lives in the ground.

Charlie's just an earthworm, an earthworm, an earthworm  
Charlie's just an earthworm  
He's not world renowned.

Charlie is an earthworm, an earthworm, an earthworm  
Charlie is an earthworm  
Who's just been found.

Charlie was an earthworm, an earthworm, an earthworm  
Charlie was an earthworm  
But he's just been eaten by a blackbird.

R.I.P. Charlie

(During the last ten years of Darwin's life he made a study of the behaviour of earthworms. There are various accounts of how the whole family joined in the experiments to discover whether they could hear.)

## **A REFLECTION ON DARWIN'S WORK**

'Endless Forms most Beautiful and most Wonderful'

He looked with amazement and excitement at the world around him.  
collected beetles from the fens of Cambridge,  
barnacles, sea slugs, polyps on the shores between Leith and Portobello,  
the fossilised bones of an antediluvian mammal on his Beagle voyage;  
he watched phosphorescent creatures the size of a pin's head,  
primitive life forms, corals and algae  
and spoke of the sense of wonder that so much beauty should be created for such little  
purpose.

Let us be thankful that he did.

This time of speculation took him beyond the notions of natural theology;  
the divine creation of each separate species merely a mental footnote, an irrelevance.  
In days of eager discovery it would not confuse and cripple his way forward. He would  
separate religion from science. Free-thinking was in his blood.  
He would study nature for its own sake, with a mind teeming with questions.

Let us be thankful that he asked questions.

Why did the geranium pollen grain he observed through his microscope have three transparent cones that burst and sprayed granules that seemed to have a self-activating power?

How was it that the storm-damaged starfish he picked up near Leith with only three arms managed to repair itself?

Why, in God's supposedly beneficent world, would a predatory wasp sting caterpillars and stuff them into its cell as food for the larvae?

How had the horse-sized mammal – the megatherium, whose skeleton he found intact at Bahia Banca, come to be extinct? What could cause a whole species to die?

And why should a thick conch shell found on a Chilean beach be covered in hundreds of tiny boreholes? What kind of marine creature had made them?

Let us be thankful that he asked questions.

It took him another 20 years to establish the importance of that and find the authority and confidence to publish his most famous book – *The Origin of Species by Means of Natural Selection*

“What a fellow that Darwin is for asking questions!” remarked Rev. Henslow, his Cambridge tutor and walking companion.

Let us be thankful that he did!

## **THE ORIGIN OF SPECIES BY MEANS OF NATURAL SELECTION. (1859)**

### **From the introduction:**

“When on board H.M.S Beagle as naturalist, I was much struck with certain facts in the distribution of the inhabitants of South America, and in the geological relations of the present to the past inhabitants of that continent. These facts seemed to me to throw some light on the origin of species – that mystery of mysteries, as it has been called by one of our greatest philosophers. On my return home it occurred to me, in 1837, that something might perhaps be made out on this question by patiently accumulating and reflecting on all sorts of facts which could possibly have any bearing on it. After five years` work, I allowed myself to speculate on the subject, and drew up some short notes; these I enlarged in 1844 into a sketch of the conclusions, which then seemed to me probable. From that period to the present day I have steadily pursued the same object. I hope I may be excused from entering upon these personal details, as I give them to show that I have not been hasty in coming to a decision.

Although much remains obscure and will long remain obscure, I can entertain no doubt, after the most deliberate study and dispassionate judgment of which I am capable, that the view which most naturalists entertain, and which I formerly entertained – namely that each species has been independently created – is erroneous. I am fully convinced that species are not immutable; but that those belonging to what are called the same genera are lineal descendants of some other and generally extinct species, in the same manner as the acknowledged varieties are the descendants of that species. Furthermore, I am convinced that Natural Selection has been the main but not exclusive means of modification.”

**And from the final chapter of *The Origin of Species*:**

“When I view all beings not as special creations, but as the lineal descendants of some few beings which lived long before the first bed of the Silurian system was deposited, they seem to me to become ennobled.”

**INTELLIGENT DESIGN – Dr. Simon Hardy**

(An extract from *Intelligent Design* by Dr. Simon Hardy, published in *Faith and Freedom*, Spring & Summer 2006, Vol.59)

A fire-mist and a planet,  
A crystal and a cell,  
A star-fish and a saurian,  
And caves where cave-folk dwell:  
The sense of law and beauty,  
A face turned from the clod –  
Some call it evolution,  
And others call it God.

*William Herbert Carruth (1859 – 1924)*

In 1859 *The Origin of Species* was published. It was immediately recognised as a naturalistic explanation of one of the deep questions, one that had hitherto been in the province of religion, ‘Where did we come from?’ It is a wonderful book so closely argued and with so much evidence that it is almost impossible not to be swept away by it. I read it in my last summer at school after my A levels, when I was almost totally ignorant of biology, and was astounded. It is the kind of argument that makes you think ‘Of course that’s right and it is so simple! ‘Why didn’t I think of that?’ Nevertheless I do understand the appeal of the creationist position of which Intelligent Design is the latest ‘scientific’ manifestation. My rare spiritual moments usually occur when I am confronted by the beauty and complexity of nature and feel so privileged and so lucky to be part of it. At these times I find it difficult to believe that it all happened without being planned and guided to its present state for my or our benefit.

The theory of Intelligent Design has a host of adherents. These range from those that believe the solar system to be five billion years old in a universe about 15 billion years old, and all life to be derived from an intelligently created single organism (a bacterium) by intelligently guided evolution, to those that believe the universe and all life forms to be six thousand and ten years old with no evolutionary process of any kind. These latter are clearly wrong. There is overwhelming evidence that the earth is billions of years old, unless of course the Great Designer is also a Great Deceiver. The enormous appeal of Intelligent Design is that it gives us a purpose for being. We do not know what that purpose is, but the theory of Intelligent Design requires an Intelligent Designer, and it must have had a reason for the original creation and (in some versions) the guidance of the changes, in either of which scenarios we are the finest outcome and therefore the ultimate purpose. We know that we are the finest outcome because we are the smartest, most self-conscious, most worried, most destructive, most religious organisms in our little corner of the universe, and probably the only ones that know they are going to die.

There are though, other organisms that have a claim to be the ultimate purpose. The great late evolutionary biologist Stephen Jay Gould wrote, “Bacteria represent the great success story of life’s pathway. They occupy a wider domain of environments and span a broader

range of biochemistries than any other group. They are adaptable, indestructible and astoundingly diverse. We cannot even imagine how anthropogenic intervention might threaten their extinction, although we worry about our impact on nearly every other form of life. The number of Escherichia coli cells in the gut of each human exceeds the number of humans that has ever lived on this planet. . . This is the 'age of bacteria' -as it was in the beginning, is now and ever shall be."

Although in Britain the creationist position was, over a few decades, largely superseded by an acceptance of the naturalistic evolutionary argument (though the Catholic Church fought a long rearguard action), in the United States there has been no such acceptance. There, fundamentalist Christian belief has remained strong. In a recent poll, 64% of those questioned were happy that creation science should be taught along with evolution, 38% thought it should replace evolution, 20% of Americans thought that Jesus would return from heaven in their lifetime. I have always believed that as countries become more affluent and as a result control their environment, so that for instance their children do not die, the power of religion diminishes and the number of fervent believers diminishes. But this has not happened there for reasons that I do not understand. It appears that a majority believe that their country really has been chosen by God to teach the world the truth and that truth is the Christian truth as laid out in the Bible. As a result they seem prepared to ignore their effect on climate change, to cast their political votes on the issues of abortion and homosexuality which have very little to do with government, and to use their enormous military power to bring American freedom and democracy to other countries that do not appear to want them. A belief in creation rather than evolution is an important element in this dangerous package.

## A SELECTION OF HYMNS

(Charles Darwin spoke of the grandeur of the natural world.)

From *Hymns for Living (HL)* and *Hymns of Faith and Freedom (HFF)*

### The Natural World

Others call it God	233 HL
A world of wonder	247 HL
Now is the time	248 HL
Life's great gifts	249 HL
Reverence for life	250 HL
Morning on morning	251 HL

### The Free Spirit

Sing in celebration	135 HL
Our kindred fellowships	136 HI
The golden heresy of truth	139 HL
Unrest	145 HL
Star born	36 HL
Wonder	38 HL

O life that makest all things new	9 HFF
Once to every soul and nation	218 HFF
Our founders' faith we'll sing of thee	224 HFF
They live the longest who live well	297 HFF
When courage fails and faith burns low	298 HFF
Scorn not the slightest word or deed	301 HFF

## BIBLIOGRAPHY AND FURTHER READING

This list contains only a fraction of available biographical and research material.

*The Origin of Species* – Charles Darwin, Penguin Classics 1985

*Voyage of The Beagle* – Charles Darwin`s Journal of Researches, Penguin Classics 1989

*The Reluctant Mr. Darwin – An Intimate Portrait of Charles Darwin and the Making of His Theory of Evolution* - David Quammen 2006

*Darwin* - Adrian Desmond and James Moore 1991

*Annie`s Box – Charles Darwin, his Daughter and Human Evolution* – Randal Keynes 2002

*Darwin and The Barnacle* - Rebecca Stott 2003

*The Lunar Men* – Jenny Uglow 2002

*Erasmus Darwin – A Life of Unequalled Achievement* - Desmond King-Hele 1999

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**The Worship Panel of the General Assembly of Unitarian and Free Christian Churches are very grateful to Rev. Margaret Kirk for her painstaking research into the life and work of Charles Darwin and for providing almost all the material in this worship pack.**

Formatted by David Dawson for the Worship Panel.

We hope that you will find this material user-friendly and that you will build a worship service from it. Don't forget to tell others, through press releases and advertising, about your 'Darwin Service'. Try to do this service in February 2009 when national attention on Darwin will probably be at its most intense; but other times will do just as well – this is not an ephemeral theme.

**FINALLY – FEEDBACK Please tell the GA Worship Panel how you used this worship pack and how we might improve future worship resources. You can write to the panel at Essex Hall, 1-6, Essex Street, London, WC2R 3HY. Or e-mail David Dawson at [dcdawson3@hotmail.com](mailto:dcdawson3@hotmail.com)**



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