<u>Beginnings</u> – ORIGIN (Where did we come from?)

- Only Two Choices
- Realize the Significance
- Is it Faith or Science?
  - o LAB Lookable, Accessible, Breakable
- Guess at the Evidence
- Inspect the Evidence
  - o Universe = "Decay"
  - Age of the Earth = "Can't Say"
  - Origin of Life by Chance = "No Way"
  - Evolution of Species and Man = "Lacks Genes and Tweens"
- No Compromise
  - DON'T <u>D</u>eath, <u>O</u>rder of Creation, <u>N</u>ames in genealogies, <u>T</u>en Commandments refer to seven-day week

Intent of Life – LIFE (Why are we here?)

- Love GOD and MAN
- Increase GROW
- Faithfulness Time, Talent, Treasure
- Eternity Past, Present, Future

<u>A</u>uthority – POWER (Who's in charge?) A God Who is:

- Personal and Loving
- **O**mnipotent
- Wise and All-Knowing
- Everywhere and Eternal
- **R**ighteous and Reliable

<u>Standards – RULES</u> (What are the rules?) God's rules are:

- **R**evealed supernaturally, not derived by reason
- Universal and apply to everyone, everywhere, all the time
- Loving
- Enforced
- Steadfast

# Age of the Earth

Now we'll move in from the universe to examine the apparent age of the earth we live on. Again, the expectations provided by the two models are very different:

Creationist Expectation	Evolutionist Expectation
The earth was created within the last 6,000 to	The earth is several billion years old. The theory
10,000 years according to the genealogies	of evolution requires millions of years for changes
traced in the Bible.	to take place.

### Evidence

#### Written History

The most reliable evidence available is the written history of men. The oldest records (other than the Bible) go back to about 3000 B.C. in Egypt and Babylon. Prior to that there is no known written history. Therefore science (which is based on human observation) can only speculate (guess) about anything prior to approximately 5000 years ago.

#### **Aging Measurements and Methods**

The various methods men have used to guess the age of the earth are based upon natural processes we observe today. Each method basically consists of:

- measuring the current state of a physical system and then
- measuring its rate of change.

This change is normally an exponential rate of decay expressed as a "half-life" of a certain duration. The half life is then used to calculate how long the system should have been in existence to reach its current state.

This seems like a logical approach, and there are several processes that are worldwide and capable of being measured. However, there are some assumptions that are being made:

- 1. **Constant rate** It is assumed that the system has always changed at the same rate as found today.
- 2. **Closed system** It is assumed that the system is a closed system, which means there are no external influences.
- 3. **Initial state** It is assumed that we know what the initial condition of the system was when it came into being.

*These are obviously very bold assumptions*, and if any one of them is not valid the aging measurement from the process could be totally inaccurate.

Let's look at an analogy. Let's say we have a pickup truck loaded with apples. Some of the apples are rotten and some are good. Now we want to determine how long the apples have been in the truck. We observe that 40% of the apples are rotten and that approximately 5% turned rotten today. So we divide 40% by 5% and determine that the apples have been in the truck for 8 days. Right?

Not necessarily. Let's examine the assumptions:

- Constant rate? How do we know that the rate of rottenness has been 5% since the beginning? What if there were no rotten apples for two weeks, then 20% turned rotten in a single day, then 10% the next day, none the next day, 5% the next day, and 5% today?
- 2. Closed system? What if the weather had been cold for two months with no apples getting rotten, then it got hot for a week? What if the truck was recently moved from the shade to the sun? What if someone recently threw some rotten apples onto the truck, and these have caused the others to turn rotten at a much faster rate?
- Initial state? How do we know that all the apples were good when the truck was loaded? What if 5% of them were already rotten? What would that do to our estimate?

The assumptions you make with this type of aging measurement are obviously critical, so we need to be careful not to pretend we can "prove" anything with these measurements since we can't verify the assumptions.

Here are the results of some key measurements used today:

#### • Magnetic Field Decay

This is thought to be one of the best examples of a closed system. The half-life of the earth's magnetic field is estimated to be 1400 years. This means that 1400 years ago it was twice as strong, 2800 years ago it was four times as strong, and 7000 years ago it was thirty-two times as strong. It seems to indicate an upper limit to the earth's age of 10,000 years, since before that time the field would have been impossibly strong.

#### • Increase of Carbon 14 in the Earth's Atmosphere

This process points to an age of about 10,000 years.

#### • Radiometric Decay Processes

These measurements compare the ratio of natural carbon to radiocarbon in organic material to determine how long it has been dead. These methods are sometimes accurate at dating events we can check in the last 3000 years, and they have been assumed to be accurate for much older results. If you make the three assumptions discussed above these methods often give ages in millions of years. But if you change the assumptions you can get very different results.

Another problem with this method is that the rate of decay of carbon can be changed by electrical charges. This means that every electrical storm might change the dating of organic material.

Examples of the problems with this method include:

- an antler which was dated three different times and gave three ages 5,340 years, 9,310 years, and 10,320 years
- a mastodon tusk which showed that the outside of the tusk died 750 years before the inside

#### • Uranium Decay Processes

These processes are based on measuring the rate of decay from different types of uranium found within rocks into different types of lead. The two unverifiable assumptions in this method involve knowing the original ratio of uranium and lead in a rock and the assumption that no other changes have altered the ratio of uranium to lead.

The results given by these methods indicate very old rock ages, even on rocks recently formed by volcanoes. These new rocks formed by volcanoes have both uranium and lead in them (initial state assumption is wrong), and thus this method shows that the rocks are very old even though they are not.

#### Potassium-Argon Decay Process

This is another decay process used often by scientists because it consistently yields old rock ages. It makes the same assumptions as the other decay processes and has the same problems. A lava flow in Hawaii which is known to be less than two hundred years old was dated by this method as being from 1 to 2.4 billion years old!

#### • Growth of Total Human Population

A study of the mathematics of population indicates that two people plus a growth rate of 0.5 percent per year would have resulted in the current world's population in about 4000 years. The current growth rate is nearly 2.0 percent per year. Thus even factoring in wars and plagues it appears that people have only been around for a few thousand years. If people had been around for a million years, lived normal life times, and averaged 2.5 children per family (conservative until recent times) we would now have (10 to the 2700th power) people on earth. That's a ten with 2700 zeroes after it!

• Others

There are many other processes (such as measuring the flow of chemicals and minerals into the ocean) that indicate ages of from 100 years to 500,000,000 years. They all can be attacked and defended by scientists, but neither the methods nor the assumptions they are based on can be proven.

#### What Does the Evidence Indicate?

We can sum up this evidence with the phrase **"CAN'T SAY".** All methods can be interpreted to support the Creation model, but some methods can also be interpreted to support the Evolution model

**IF** the assumptions are correct. Since we can't verify the assumptions we'll be conservative and say that the evidence is not conclusive.

#### **Creationist Interpretation**

Much of this evidence supports the theory of a (relatively) young earth. Several measurements correspond very well with a reasonable Biblical time-frame, and some indicate an even younger age. **Evolutionist Interpretation** 

The evolutionists are very selective in accepting the validity of these methods. The methods usually referred to by "mainstream scientists" point to a much older earth, but these methods are also the most uncertain as far as the assumptions of rate/closed/state. Methods that show a more recent beginning actually have strong points in their favor, yet evolutionists refer only to those that result in millions of years. The fact that several solid pieces of evidence point to a much younger earth does not shake their faith in the evolutionary time-frame. But it does confirm that we are talking about faith, not science.

## Why So Impossibly Long?

If the aging estimation methods are not conclusive, why do evolutionists insist on incredibly long periods of time? Is there a reason that their "bias" would require millions and billions of years?

Yes, there is. *I believe the major reason evolutionists are adamant about such incomprehensible periods of time is because....they are incomprehensible.* None of us can really envision a time period of millions or billions of years. The 2000 years since Christ is a very long time for our minds, and there are 500 of those time periods in a million years. If scientists say that the earth is over 4 billion years old, that is 2,000,000 of the 2000-year periods of time since Christ. Our brains can't fathom that much time. So if someone says that something happened during a period of time that we can't even comprehend, how can we dispute it?

Evolutionary theory has no clear fossil evidence, no viable explanation for the origin of life, no reasonable mechanism for how new genetic information could have come about. So if someone said that evolution created our incredible complexity of life within a time period we could grasp, we would think that sounded ridiculous. *But with a time frame that is impossible to comprehend, the impossible seems more possible.*