

**“Let There Be Fish & Fowl”**

*Sermon Notes*

- **If you are impressed with God’s heavens and his seas,  
just wait ‘till you see how he furnishes them**

*\*3 truths from the 5th day...*

1. Fish and fowl rise by divine decree (v.20)
  
  
  
  
  
  
  
  
  
  
2. Fish and fowl reflect divine artistry (v.21)
  
  
  
  
  
  
  
  
  
  
3. Fish and fowl receive divine blessing (vv.22-23)

**Next Week: Genesis 1:24-25 - “Let There Be Beasts”**

## **MEFC Community Group Study Guide**

For the week of June 22nd-28th

### ***Young Earth or Old Earth: What Does the Bible Teach?***

*Starting last week and once again this week, we have the privilege to dive into the important question of the scriptural teaching concerning the age of the earth. From the beginning of our movement as the Evangelical Free Church (EFCA), this is a matter which we have been committed to discuss, even to debate, but over which we do not divide.*

*The EFCA has both young earth and old earth creationists within our fellowship and we consider that a strength rather than a weakness. Just a few years ago at the Desiring God website<sup>1</sup>, a brief written debate was hosted between two outstanding evangelical scholars. Dr. Jason DeRouchie represented the young earth position, and Dr. Wayne Grudem gave the old earth view. After each one made his case, the other had an opportunity to respond. Last week, we considered the young earth view from Dr. DeRouchie followed by the old earth response from Dr. Grudem.*

*This week, we'll start with Dr. Grudem and the old earth position followed by the young earth response from Dr. DeRouchie. Since this is a longer study guide than usual, if you intend to use it in your community group, you may wish to read through it carefully prior to the meeting. That way, you can maximize the discussion time. We hope this study is a blessing to you as we continue to explore the book of Genesis!*

#### ***“Our Old Earth”: Arguments for Billions of Years By Dr. Wayne Grudem***

I do not believe that God intended in Scripture to tell us the age of the earth. In the following material, I will explain the factors that led me to this conclusion about Scripture and then summarize some scientific indications of the age of the earth.<sup>1</sup>

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<sup>1</sup> <https://www.desiringgod.org/series/how-old-is-the-earth> . Accessed 6/13/25 @ 2pm.

## Meaning of the Word Day

The word day as used in Genesis 1 translates the Hebrew word *yôm*, which often refers to 24-hour days, but in other contexts clearly refers to an unspecified period of time. We see this in the immediate context, in Genesis 2:4: “. . . in the day that the Lord God made the earth and the heavens.” Here, day refers to the entire creative work of the six days of creation.

Other examples of the word day to mean a period of time include Psalm 20:1 (“May the Lord answer you in the day of trouble!”), Proverbs 24:10 (“If you faint in the day of adversity, your strength is small”), Proverbs 25:13 (“Like the cold of snow in the time [*yôm*] of harvest . . .”), and Ecclesiastes 7:14 (“In the day of prosperity be joyful, and in the day of adversity consider”).

Even the first use of the word day in Genesis 1 does not mean a day of 24 hours but simply the daylight hours: “God called the light Day, and the darkness he called Night” (Genesis 1:5).

## Genesis 1 in Light of Science

The context of Genesis 1 does not clearly require one meaning of day over another, and if scientific data, drawn from many different disciplines and giving similar answers, convinces us that the earth is billions of years old, then this possible interpretation of day as a long period of time may be the best interpretation to adopt.

For those who hold to an old earth, the situation is something like that faced by Christians who first held that the earth rotates on its axis and revolves about the sun. They needed an explanation for verses about the sun “rising” or “going down,” like Ecclesiastes 1:5: “The sun rises, and the sun goes down, and hastens to the place where it rises.” (See also Psalm 104:22; James 1:11; and others.) They did not have to claim that the passages require us to believe in a heliocentric (sun-centered) solar system, nor did they have to say that this was the most natural or the easiest interpretation, but only that this is a possible legitimate understanding of the texts, seeing these verses as speaking from the standpoint of the observer. From there, observational evidence taken from science shows us that this is, in fact, the correct way to interpret those texts.

## Answering Objections

Each of the days of Genesis 1 ends with an expression such as, “And there was evening and there was morning, the first day” (Genesis 1:5). Does this require us to conclude that the days must be 24-hour days? Not necessarily, because the phrase may be simply the author’s way of telling us that the end of the first creative “day” (that is, a long period of time) occurred, and the beginning of the next creative “day” had come. In addition, alert readers would recognize that the first three creative “days” could not have been marked by evening and morning as caused by the sun shining on the earth, for the sun does not appear until the fourth day (Genesis 1:14–19). Therefore, Genesis 1 itself shows that references to “evening and morning” in the chapter do not refer to the ordinary evening and morning of days as we know them now.

Does it matter that the days are numbered? Supporters of a young-earth position sometimes argue that, while the Hebrew *yôm* can elsewhere refer to a longer period of time, its use in Genesis 1 is different because numbers are attached, and whenever *yôm* has a number attached, it refers to 24-hour days.

I do not find this argument persuasive because the requirement to consider only cases of the Hebrew *yôm* with a number attached acts as a filter to preselect the desired “24-hour day” answer. This is because, in the course of ordinary human life, the usual kinds of “days” that people count are 24-hour days, not longer periods of time. The creation narrative just happens to be the only context where longer periods of time are counted.

Nevertheless, interpreters who have decided that the days of Genesis 1 must be 24-hour days have another option available to them. The creation days might be 24 hours long, with many millions of years between the days. I think this must be considered another possible way to understand Genesis 1 in a manner that is consistent with an old earth.

## Gaps in the Genealogies

In the 1650s, Irish archbishop James Ussher, a distinguished historian and biblical scholar, argued from the genealogies in Genesis 5 and 11 that the date of God’s creative work in Genesis 1 was October 22, 4004 BC. To arrive at this conclusion, he used both the genealogies in Genesis 5 and 11 and extrabiblical historical sources.

However, it is doubtful that God's purpose in these genealogies was to enable us to calculate the date of creation. If that had been God's intention, he could have done so clearly by having Moses write, "So all the years from Adam to Abraham were 2004 years" (or some similar number). But there is no such summary statement in Genesis 5 or Genesis 11.

It is certainly possible, on the other hand, that the genealogies in Genesis 5 and 11 contain gaps. For instance, the genealogy in Matthew 1 tells us that Joram was "the father of Uzziah, and Uzziah the father of Jotham" (Matthew 1:8–9). But from 1 Chronicles 3:10–12 (which uses the alternate name Azariah for Uzziah), we learn that three generations have been omitted by Matthew: Joash, Amaziah, and Azariah.

So when Genesis 5 says, "When Seth had lived 105 years, he fathered Enosh," it could mean that Seth fathered someone whose descendent was Enosh. Thus Enosh in Genesis 5:6–8 could in fact be someone who came many generations after Seth. In that case, the large number of years is not meant to give us a chronology that can be added together to get the age of humanity, but rather it is given to show us the health and longevity of someone who could still beget children at more than 100 years old and could even live to 912 years.

For the God who lives forever, for whom "one day is as a thousand years, and a thousand years as one day" (2 Peter 3:8), and who delights in gradually working out his purposes over time, perhaps 13.8 billion years was just the right amount of time to wait for light from vastly distant stars to reach the earth, so that as we discover the age and size of the universe, we would be amazed at the greatness of our Creator, who made such an immense universe and whose eternal existence is far greater than even 13.8 billion years.

## **Scientific Evidence for an Old Earth**

Different kinds of observational (or scientific) evidence from astronomy and the earth sciences seem to indicate that both the earth and the universe are extremely old (13.8 billion years for the universe and 4.5 billion years for the earth).<sup>2</sup>

## *Expansion Rate of the Universe*

Astronomers can measure the distance from earth to various stars and galaxies. They can also measure the speed at which they are moving away from us. With those two values, they can “back up” the process to find how long the universe has been expanding. After summarizing three different methods of measuring such expansion, Hugh Ross says they show an average age of the universe of “ $13.79 \pm 0.06$  billion years,” and he adds, “The consistency of the three independent methods is remarkable.”<sup>3</sup>

## *Starlight from Events in the Distant Past*

Many stars are so far from the earth that it would take millions or even billions of years for their light to reach us. They give us evidence that requires a brief discussion of the speed of light.

The speed of light (in a vacuum) is approximately 186,000 miles per second, and the sun is about 92,960,000 miles from the earth. That means it takes just over eight minutes for light from the sun to reach us. Therefore, when we see a sunrise or sunset, we are not seeing the sun as it is at that very moment, but we are seeing the sun as it was eight minutes ago.

This principle also applies to light from other stars. When we look through a telescope at Alpha Centauri (the star that is closest to us, after the sun), we are looking at a star that is 4.4 light-years away, which means the light from that star took 4.4 years to reach us. Therefore, what we see is Alpha Centauri as it existed 4.4 years ago. In the same way, some of the stars we can observe are so distant that their light would take 13,800,000,000 years to reach us. This indicates a very old universe.

Young-earth supporters may respond that perhaps God created the universe with light rays already in place, so that Adam and Eve would see thousands of stars on the first night after they were created. This of course is possible. Certainly Adam and Eve themselves had an “appearance of age” (God created them as adults, not as infants), as did all the animals that God created as “grown-up” animals.

But there are difficulties with this suggestion. First, there is the existence of white dwarfs, which are formed when stars reach the end of their lifetimes and run out of nuclear fuel.<sup>4</sup> But “a star takes millions of years, minimum, to burn

up all of its nuclear fuel and become a white dwarf.”<sup>5</sup> If the universe is only 10,000 years old, and if God created stars with light rays in place, why would he also create optical illusions that look like material from stars that died billions of years ago, when in fact those stars never even existed?

The same is true for other events that astronomers observe in space, such as the existence of supernovas, which are massive, extremely bright explosions, lasting several weeks or months, that happen when stars are about to burn out. But according to young-earth advocates, as Ross notes, “The supernova eruption astronomers claim to see in the Large Magellanic Cloud 163,000 light-years away did not occur 163,000 years ago.” In fact, according to a young-earth view, it never occurred, since nothing existed before 10,000 years ago. When astronomers see such supernovas that explode and then quickly die out, these would be optical illusions placed in outer space to make us think (wrongly) that supernovas happened hundreds of thousands of years ago. It would seem contrary to God’s character to deceive us like this.<sup>6</sup>

Some young-earth advocates have responded that perhaps the speed of light has changed, and perhaps light traveled much faster a few thousand years ago. But the speed of light is one of the most universal constants in physics, and the need to speculate that it might have been vastly different (a million times faster?) seems to me to cast doubt on the entire young-earth viewpoint.

### *Ice Layers*

Scientists have drilled deep into the ice layers in the central parts of Antarctica and northern parts of Greenland. They have found that “three ice cores from Antarctica . . . provide a continuous record of the past 800,000, 720,000, and 420,000 years, respectively.”<sup>7</sup> A young-earth advocate might respond that multiple layers could be laid down within a single year, but Ross notes that “within the layers are dust signatures of known volcanic eruptions,” including eruptions of Mount Vesuvius in AD 79, 472, 512, 968, 1037, 1139, 1631, and 1944. “Counting the layers between layers that contain the dust signatures of these eruption events, researchers have confirmed that each layer indeed corresponds to one year.”<sup>8</sup>

## *Sediment Layers at the Bottom of Lakes*

Geologists Gregg Davidson and Ken Wolgemuth have written an extensively documented article showing that “finely layered sediments from Lake Suigetsu [in Japan] were deposited annually going back more than 50,000 years.” They also show that the most recent of these layers of sediment correspond closely with tree rings that go back more than 14,000 years, and that carbon-14 decay rates (measured by various samples taken at various depths of the sediment layers) “have remained unchanged.”<sup>9</sup>

## *Radiometric Dating of Rocks*

Igneous rocks are formed when lava or magma (very hot molten material found beneath the earth) cools and changes from a liquid to a solid. Some igneous rocks consist partly of radioactive material that begins to decay as soon as a rock solidifies, and when it decays it changes into another element. For example, uranium-238 decays and turns into lead-206. But uranium-235 becomes lead-207, and thorium-232 becomes lead-208.<sup>10</sup> For every type of radioactive substance, the rate of such decay can be measured. With that information, geologists can measure the amount of each kind of uranium and thorium isotope and the amount of each kind of lead isotope in a rock, and with that information they can determine six independent measures of the age of a rock.

Since each of the uranium and thorium isotopes decays at a different rate, if a rock sample has all three of the uranium and thorium isotopes and all three isotopes of the resulting lead, the proportion of each kind of uranium, thorium, and lead gives us six different independent measures of the age of the rock. Ross reports that “ratios of different radiometric elements relative to the lead end products and the ratios of the different lead end products relative to one another provide consistent, accurate dates — all saying that the earth is billions of years old.”<sup>11</sup>

## *Continental Separation*

Fossil-bearing rock fields near the coasts of Africa and South America were apparently previously joined together and then separated by continental drift as the continents gradually moved apart. In fact, anyone who looks at a globe can see that, if the continents of North and South America could be moved eastward and the continents of Europe and Africa could be moved westward, with slight



rotation the continental shelves would fit together. In addition, underneath the Atlantic Ocean there is a large mountain ridge called the Mid-Atlantic Ridge that follows the curved pattern of a line halfway between these continents. All this is evidence of plate tectonics, the scientific study that explains movements of the plates on which the continents rest.

Now, there are two separate methods to determine how long ago the continents separated. Taking samples from the crust of the Atlantic Ocean at the edges of the continents, “maximum ages of about 180 million years for the Atlantic Ocean crust are obtained.”<sup>12</sup> This suggests that the continents separated about 180 million years ago, leaving the Atlantic Ocean between them. If we measure the distance from a point on the North American coastline to the corresponding point on the African coastline, the distance is 3,480 miles. If we divide 3,480 miles by 180,000,000 years, it “yields an average rate of 1.2 inches per year.”<sup>13</sup> Repeated calculations at different points vary only slightly, from 1.1 to 1.7 inches per year.

But are these continents actually moving apart at that rate? Long-term precise satellite “measurements of the relative positions of North America and North Africa document a current spreading rate of approximately 1 inch per year, a value in remarkable agreement with the radiometrically determined rates.”<sup>14</sup> This confirms that the continents began to move apart 180,000,000 years ago — but that is impossible if the earth is less than 10,000 years old.

## **Conclusion: Old Earth**

I realize that young-earth advocates will disagree with my assessment of this evidence. They will claim that maybe the speed of light was vastly different, maybe the rate of sediment deposit in lakes was vastly different, maybe the speed of movement of the earth’s tectonic plates was vastly different, maybe the rate of decay of radiometric elements in rocks was vastly different, and so forth. Eventually this begins to sound to me like, “If the facts were different, they would support my position.” But that kind of argument is just an admission that the facts do not support one’s position.

As for the biblical evidence, I think it can be legitimately and honestly understood to allow for either an old-earth or a young-earth view. I do not think the Bible tells us or intends to tell us the age of the earth or the age of the universe.

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1. For more detailed arguments for the old-earth position, see my *Systematic Theology*, 2nd ed. (Grand Rapids: Zondervan, 2020), 385–413. ↵
  2. Much of the following material, plus the relevant documentation, comes from the Christian astronomer Hugh Ross, in the much-expanded 2015 edition of his book *A Matter of Days: Resolving a Creation Controversy*, 2nd ed. (Covina, CA: RTB Press, 2015). Ross interacts repeatedly and specifically with young-earth objections to his arguments. ↵
  3. Ross, *A Matter of Days*, 147, 150. ↵
  4. “White dwarfs are the final state of all stars possessing less than enough mass to become either black holes or neutron stars” (Ross, *A Matter of Days*, 156). ↵
  5. Ross, *A Matter of Days*, 156. ↵
  6. I am glad to see that the ministry *Answers in Genesis*, though holding to a young earth, rejects the idea that God created the universe with light rays from stars and the earth already in place; see Jason Lisle, “Does Distant Starlight Prove the Universe Is Old?” December 13, 2007, <https://answersingenesis.org/astronomy/starlight/does-distant-starlight-prove-the-universe-is-old/>. ↵
  7. Ross, *A Matter of Days*, 190. ↵
  8. Ross, *A Matter of Days*, 190. ↵
  9. Gregg Davidson and Ken Wolgemuth, “Testing and Verifying Old Age Evidence: Lake Suigetsu, Varves, Tree Rings, and Carbon-14,” *Perspectives on Science and Christian Faith* 70, no. 2 (June 2018): 75–89. ↵
  10. Ross, *A Matter of Days*, 187. ↵
  11. Ross, *A Matter of Days*, 187. ↵
  12. Roger Wiens, “So Just How Old Is That Rock?” in *The Grand Canyon: Monument to an Ancient Earth*, ed. Carrol Hill, Gregg Davidson, Tim Helble, and Wayne Ranney (Grand Rapids: Kregel, 2016), 94. ↵
  13. Wiens, “So Just How Old,” 94. ↵
  14. Wiens, “So Just How Old,” 94. ↵

## **“A Response to Old-Earth Arguments”**

### **By Dr. Jason DeRouchie**

Dr. Grudem usually uses Scripture to ground his Christian doctrine and ethics. However, he supports his belief in an old earth with almost no biblical evidence, dismisses the proposals of scientists guided by God’s word, and follows an interpretation of the observable data put forward by scientists who are calculating the universe’s age based on naturalistic uniformitarian assumptions.

(Due to the constraints of this article, I present the following responses in summary form. For further explanations and resources, see the [additional notes](#) on my personal website.)

### ***Day Means Ages?***

Context determines the meaning of *day* (e.g., daylight vs. an unspecified time in Genesis 1:5 and 2:4). The weeklong structure of Genesis 1:1–2:3 and the repeated ending formula “evening and . . . morning” on days 1–6 (Genesis 1:5, 8, 13, 19, 23, 31) indicate that the days are not ages but 24-hour periods. While the week structure could be figurative (as some old-earthers hold), Moses does not portray the “days” as ages. Because God built Israel’s workweek (6+1) off his creation week (Exodus 20:11), the six work days in Genesis 1 are most naturally 24-hour periods.

The earth only needs to rotate in relation to a fixed light source to produce evening and morning. In Genesis 1, light is the only matter that simply “was” (Genesis 1:3); God “makes” or “creates” everything else (Genesis 1:7, 16, 25, 26; 1:21, 27) or guides its production (Genesis 1:11–12). Furthermore, “God is light” (1 John 1:5), and Jesus is “the light of the world” (John 8:12), through whom God made all things and in whom was the life that became the light of men (John 1:3–4). In the consummate new creation, there will be “no need of sun or moon . . . , for the glory of God gives it light, and its lamp is the Lamb” (Revelation 21:23). Similarly, Scripture suggests that, at the beginning, God sustained the earth and provided evening and morning through his own glory’s fixed light, centered in his Son. Indeed, the one who spoke light into darkness is now shining into the new creation (2 Corinthians 4:6). That God gave light apart from luminaries on days 1–3 adds to the implied polemic against pagan worldviews that “the two great lights . . . and the stars” are not “gods” but merely secondary, unnecessary agents by which the true Creator supplies life and order to his universe.

## Gaps in the Genealogies?

“When Seth had lived 105 years, he fathered Enosh” (Genesis 5:6). For Grudem, the presence of selective genealogies elsewhere (e.g., Matthew 1:8–9) implies the genealogies in “Genesis 5 and 11 contain gaps.” While not common, the Hebrew verb translated “fathered” (Hiphil *yld*) allows for *genealogical gaps* (unnamed descendants), meaning the subject may be the marked direct object’s ancestor and not his immediate father (see Deuteronomy 4:25; 2 Kings 20:18). Thus, Enosh could be Seth’s son, grandson, or more distant relative.

Nevertheless, Grudem infers that Genesis 5:6 allows for *chronological gaps* (i.e., missing years). Yet the text requires that Seth was 105 years old when Enosh was born, regardless of whether Enosh was Seth’s immediate son or more distant relative. Seth’s age marks the time when the action and result happened, with no chronological gaps. Even if one allows for genealogical gaps, Genesis 5 and 11 supply a chronological timeline that implies a young humanity.

## Death and Suffering Before the Fall?

While unstated, Grudem’s position requires millions of years of animal death and suffering *before the fall*. Yet Scripture associates creature mortality and misery only with curse (see my original arguments for a young earth).

## Scientific ‘Evidence’ for an Old Earth?

Grudem has no compelling biblical reasons for believing in an old earth. Furthermore, if any of my biblical arguments for a young earth is sound, then Scripture indicates that Grudem’s scientific interpretations are seriously flawed and need to be aligned with Scripture’s inerrant testimony.

Grudem’s “facts” are actually only interpretations of the observable data growing from his belief that present measurable processes are the key to understanding the remote past. He slights young-earthers for highlighting this, but the point stands: uniformitarian assumptions drive all six of his scientific claims, even though *Scripture and science suggest that scientific means alone will not establish the earth’s age*.

First, the Bible portrays creation as the omnipotent God's supernatural work. Grudem upholds this yet hesitates to affirm Scripture's testimony that light and terrestrial vegetation (Genesis 1:3, 11) preceded the luminaries, whose sole revealed purpose is to guide life on earth (Genesis 1:14) and to highlight Yahweh's promises (Genesis 15:5; Jeremiah 33:22) and power (Isaiah 40:25–26; Amos 5:8). Moses had no problem portraying God causing life-giving light to shine without the sun. Why should we?

Second, against scoffers who claim, "All things are continuing as they were from the beginning of creation" (2 Peter 3:4), Peter stressed how this conviction overlooks that "the world that then existed was deluged with water and perished" (2 Peter 3:5–6). In the same way that miracles can alter normal time rates in ways unperceived by non-onlookers (e.g., John 2:9–10), so too the global flood's heat and pressures would have radically altered geography, geology, climate, and more. Scientists recognize that energy and force can drastically compress matter's formation time, and because God shaped the earth through cataclysm (see Genesis 7:10–24), the process rates the flood affected *must* have been very different from those measured today.

The third reason science alone cannot establish the earth's age is because so many assumptions shape scientific interpretation. I will mention six.

1. With his belief that the universe is expanding, Grudem assumes light's one-way speed is equal to its roundtrip speed (which is unnecessary), that the universe began with no size (in contrast to a mature universe), and that cooling and expansion rates have remained constant over billions of years (which we cannot know and which many physicists question).
2. Because travel effects time, physicists can measure only light's roundtrip speed (e.g., off mirrors = 186,000 mi/sec or 300,000 km/sec). Grudem assumes that light's speed is constant in all directions (isotropic), but light's one-way speed could be virtually instantaneous (anisotropic), which is what Genesis 1:14–15 suggests.
3. The polar ice sheets' age and formation determine the expected annual layer compression-thickness in the cores, and this guides where one measures cycles of oxygen isotopes to calculate age. If weekly storms formed the ice masses rapidly in a single ice age following the flood, then the annual thickness would be greater (not having thinned as much under eons of pressure), and old-earthers would be falsely treating multiple storm cycles in single years as if each one represented a year.

4. Dating old lake deposits assumes their pattern and rate remained unchanged throughout time, but catastrophes like floods, hurricanes, and volcanic eruptions create moving slurries, resulting in storm or flood deposits (called rhythmites) that are indistinguishable from the annual seasonal deposits (called varves). And because varve counts, tree-ring counts, and radiocarbon-14 dates are inter-calibrated, they should not be used to reinforce one another.
5. While radiometric dating of rocks helps establish relative formation sequence in earth history, Grudem assumes that we know the starting conditions (e.g., only uranium [= parent isotope] and no lead [= daughter isotope]), that no contamination or leaching has altered rock makeup (which can't be measured without an independent benchmark), and that the decay rate has remained constant, uninfluenced by altered forces of heat or pressure (i.e., catastrophe) that could speed the decay.
6. Plate tectonics best explains why the continents are no longer united (Genesis 1:9–10), but Grudem assumes that the rate of continental separation was always gradual, as it is today, whereas the catastrophe model of rapid separation also aligns with the data, answers why plate movement would have slowed drastically after the flood, and explains both the lack of compression in ocean sediments and the erratic magnetic polarity in the ocean crust (suggesting rapid cooling in non-uniform ways due to contact with chaotic ocean waters).

## Conclusion

God has written two “books” — the word and the world, and the former’s infallible and inerrant nature requires that it must always guide our reading of the latter. Grudem attempts to establish the earth’s age from science alone. However, he makes far too many assumptions, most of them guided by uniformitarian thinking that runs counter to Scripture’s testimony to God’s powerful control and to the flood catastrophe. God alone was present at the beginning, and his word strongly points to a young earth and should guide our scientific interpretations of the observable data.