

A.3.1. Creationism and the Age of the Earth

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Question: What is your position on the meaning of the days of creation in Genesis 1, on the historicity of Adam and Eve, on how long ago they could have lived, and on anything else that you would like to share about the problems surrounding origins, like how dinosaurs fit in? We will assume together that Genesis was not designed to be a modern textbook on physics and geology but focuses on the larger issues of sin and redemption.

Preface: I approach the Bible as a theologian, not as a scientist. Furthermore, my focus in biblical interpretation is on the message rather than on the background of the biblical materials. As such, to respond to this question has required that I tread in some areas (i.e., the place of dinosaurs and the age of the earth) to which I can only speak to biblically and not scientifically. I affirm without reservation the clarity, sufficiency, and unity of Scripture, and I am convinced that the truth of God's Word will align with the truth of God's world. Furthermore, I am convinced that our faith in the biblical message is only justified *if* that which the biblical authors believed to be actual events in history really occurred. Faith without historical grounding has no lasting value (so 1 Cor 15:17).

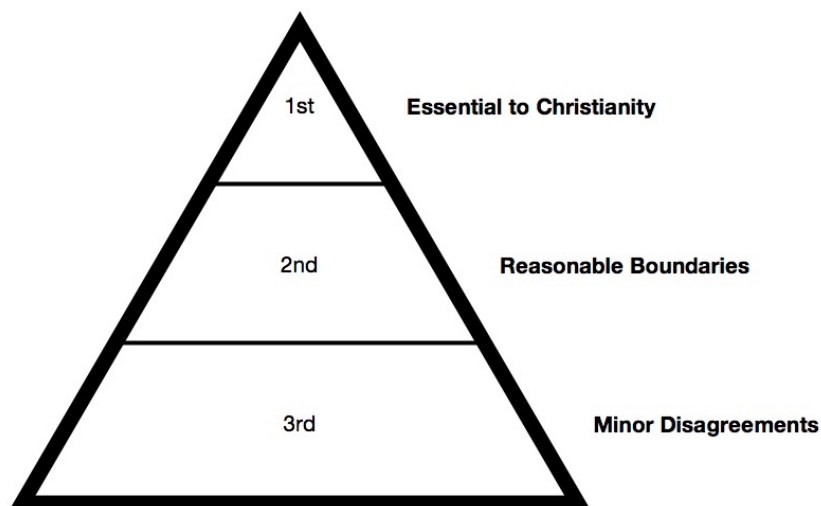
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iv. Mankind's station as the climax of creation and sole image of God and Adam's high role as head of the first creation supports a young earth. (55)
v. Scripture usually portrays the suffering and death of living creatures, including animals, as part of curse, so millions of years of animal death and suffering pre-fall seems unlikely. (57)
vi. The limiting of animal death in the eternal state as a restoring of Eden suggests that all terrestrial death began after the fall. (63)
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I. Theological Boundaries with Respect to Creationism (+ a Discussion of Dinosaurs)

A. Introduction

1. Two initial questions:
 - a. Does the Christian's belief that the Bible is without error require believing in the historicity of Adam and Eve?
 - b. Does the Christian's belief that the Bible is without error require holding that God created the world in six 24-hour periods and that the earth is roughly 6,000 years old?
2. The testimony of Bethlehem's Elder Affirmation:
 - a. §4.1 We believe that God created the universe, and everything in it, out of nothing, by the Word of His power. Having no deficiency in Himself, nor moved by any incompleteness in His joyful self-sufficiency, God was pleased in creation to display His glory for the everlasting joy of the redeemed, from every tribe and tongue and people and nation.
 - i. *Implication 1:* The universe is a divine creation, not an accident.
 - ii. *Implication 2:* God was the only pre-existent reality before the universe. He created "out of nothing."
 - iii. *Implication 3:* God created the universe not out of need but out of pleasure.
 - b. §4.2 We believe that God directly created Adam from the dust of the ground and Eve from his side. We believe that Adam and Eve were the historical parents of the entire human race; that they were created male and female equally in the image of God, without sin; that they were created to glorify their Maker, Ruler, Provider, and Friend by trusting His all-sufficient goodness, admiring His infinite beauty, enjoying His personal fellowship, and obeying His all-wise counsel; and that, in God's love and wisdom, they were appointed differing and complementary roles in marriage as a type of Christ and the church.
 - i. *Implication 1a:* Humans were *not* the result of an evolutionary process but a distinct, special creation.
 - ii. *Implication 1b:* While not explicit, the reading of Gen. 2:7 as a historical rather than figurative claim ("Then the LORD God formed the man of dust from the ground and breathed into his nostrils the breath of life, and the man became a living creation") implies also that Bethlehem would not support the view of animal (non-human) evolution, for "out of the ground the LORD had formed every beast of the field and every bird of the heavens" as well (2:19).
 - iii. *Implication 2:* All of humanity everywhere and from all time derives from these two individuals.
3. Three major creationist views:
 - a. The views:
 - i. Young earth-creationism (YEC, Jason Meyer, Jason DeRouchie)
 - ii. Old earth-creationism (OEC, Wayne Grudem, John Beckman)
 - iii. Evolutionary creationism (EC, James Stump, Tim Keller)

- b. Comments:
- i. All three views affirm supernaturalism over naturalism; all affirm that God alone created and upholds the universe.
 - ii. The Bethlehem EAF declares that the church does not permit its leaders to hold to theistic evolution of humans, and it implies that believing any form of evolution of any animal is also wrong. Bethlehem has pastors and professors who are YEC and OEC.
 - iii. Bethlehem does not declare EC heretical, and we have close relationships with Christians who hold to it, including some members of Bethlehem Baptist Church.
 - iv. From the perspective of theological triage, it seems that Bethlehem would place the difference between YEC and OEC in the 3rd tier (minor disagreements), but would place the distinction between YEC/OEC and EC as a 2nd tier issue (reasonable boundaries).



4. 1st Tier Issues in Creationism Debate:
- a. *God created everything visible and invisible out of nothing.*
 - Gen 1:1. **In the beginning God** created the heavens and the earth.
 - Rom 4:17. [God] gives life to the dead and **calls into existence the things that do not exist**.
 - Col 1:16. For by [the Son] all things were created, in heaven and on earth, **visible and invisible**, whether thrones or dominions or rulers or authorities—all things were created through him and for him.
 - Heb 11:3. By faith we understand that the universe was created by the word of God, so that what is seen was not made out of things that are visible.
 - b. *God created the world for his glory yet not out of need.*
 - Acts 17:24–25. The God who made the world and everything in it, being Lord of heaven and earth, does not live in temples made by man,²⁵ nor is he served by human hands, **as though he needed anything**, since he himself gives to all mankind life and breath and everything.
 - Rom 11:36. For **from him** and through him and **to him** are all things. To him be glory forever. Amen.

- Col 1:16. For by [the Son] all things were created, in heaven and on earth, visible and invisible, whether thrones or dominions or rulers or authorities—all things were created through him and **for him**.
- c. *God is distinct from his creation but continues to be active in it, under it, and over it.*
- Gen 1:1. **In the beginning God** created the heavens and the earth.
 - Eccl 11:5. As you do not know the way the spirit comes to the bones in the womb of a woman with child, so you do not know the work of God **who makes everything**.
 - Rom 11:36. For from him and **through him** and **to him** are all things. To him be glory forever. Amen.
 - Acts 17:24–25. The God who made the world and everything in it, being Lord of heaven and earth, does not live in temples made by man,²⁵ nor is he served by human hands, as though he needed anything, since **he himself gives to all mankind life and breath and everything**.
 - Col 1:17. And [the Son] is before all things, and **in him all things hold together**.
 - Heb 1:3. [The Son] ... **upholds the universe** by the word of his power.
- d. *God created the world good and for the benefit of humanity.*
- Gen 1:31. And God saw everything that he had made, and behold, **it was very good**.
 - Acts 17:24–25. The God who made the world and everything in it, being Lord of heaven and earth, does not live in temples made by man,²⁵ nor is he served by human hands, as though he needed anything, since **he himself gives to all mankind life and breath and everything**.
 - 1 Tim 4:4. For **everything created by God is good**, and nothing is to be rejected if it is received with thanksgiving.
- e. *God specially created humans, male and female, both of whom bear his image and thus enjoy lasting value.*
- Gen 1:26–27. Then God said, “Let us make man **in our image, after our likeness**.” ...²⁷ So God created man in his own image, in the image of God he created him; **male and female** he created them.
 - Gen 9:6. Whoever sheds the blood of man, by man shall his blood be shed, for **God made man in his own image**.
 - Jas 3:8–9. But no human being can tame the tongue. It is a restless evil, full of deadly poison.⁹ With it we bless our Lord and Father, and with it we curse **people who are made in the likeness of God**.
- f. *Adam and Eve are historical figures to whom all the rest of humanity is related.*
- Acts 17:26. And he made from one man every nation of mankind to live on all the face of the earth.
 - Gen 5:1–3. This is the book of the generations of Adam. When God created man, he made him in the likeness of God.² Male and female he created them, and he blessed them and named them Man when they were created.³ When Adam had lived 130 years, he fathered a son in his own likeness, after his image, and named him Seth.
 - Luke 3:23, 38. Jesus, when he began his ministry, was about thirty years of age, being the son (as was supposed) of Joseph, ...³⁸ the son of Seth, the son of Adam, the son of God.
- g. *Adam and Eve are historical figures who rebelled against God and in whom all of humanity sins resulting in God’s cursing the world and the need for the gospel.*
- Gen 3:6. So when the woman saw that the tree was good for food, and that it was a delight to the eyes, and that the tree was to be desired to make one wise, she took of its fruit and ate, and she also gave some to her husband who was with her, and he ate.
 - Gen 3:15. He shall bruise your head, and you shall bruise his heel.

- 1 Cor 15:21–22. For as by a man came death, by a man has come also the resurrection of the dead. ²² For as in Adam all die, so also in Christ shall all be made alive.
- Rom 8:20–21. For the creation was subjected to futility, not willingly, but because of him who subjected it, in hope ²¹ that the creation itself will be set free from its bondage to corruption and obtain the freedom of the glory of the children of God.

B. The necessity for the historicity of Adam and Eve

1. *The Bible argues that all humanity came from one man:* “And he made from one man every nation of mankind to live on all the face of the earth” (Acts 17:26).
2. *The gospel demands that Adam and Eve were historical figures:* “As in Adam all die, so also in Christ shall all be made alive” (1 Cor 15:22; cf. Rom 5:15–19); “I will put enmity between you and the woman and between your offspring and her offspring; he shall bruise your head, and you shall bruise his heel” (Gen. 3:15; cf. Rom 16:20). To remove the first covenant head through whom death came resulting in all mankind being infected and affected by sin (Rom 5:12; cf. Eph 2:1–3) calls into question the very need for a new covenant head to fix the problem. If the universal need for blessing is not real in Gen. 1–11, the promise of universal blessing—the gospel (Gal 3:8)—is unnecessary in Gen. 12:3! I don’t think I am overstating the case when I say that we will only appreciate and revere the person, work, and beauty of Christ (the last Adam) when we affirm the historical veracity of Adam and Eve as portrayed in Scripture.
3. *The immediate biblical context of and later biblical reflections on the early chapters in Genesis demand that Adam and Eve were historical figures.*
 - a. The historical narrative beginning in Gen. 2:4 runs non-stop to the end of 2 Kings. While narrative time occurs at an excessively high rate in Gen. 2:4–11:9 in contrast to the 400 years in Gen. 12–50, the 400 years in Exod 1, the 40 years in Exod 2, the 80 years in Exod 3–Deut 32, and the roughly 900 years in Joshua–Kings, there is nothing in the early chapters to suggest anything other than a historical account of comparable nature to the rest of the Pentateuch and Deuteronomistic History.
 - b. This view is supported by the very structure of Genesis, whose 10(11) *toledeths* are arranged through presence or absence of a conjunction into five distinct units, the first setting the context for the need of blessing and the second two highlighting the hope and agency of blessing, respectively. The parallel structure established by the two ten-member genealogies suggests that each grouping should be read in a similar way, all historical and designed to highlight God’s preservation of the promised line and his provision of Israel as a channel of blessing to the world. The fact that the genealogy of 5:1 begins with Adam also emphasizes that his historicity cannot be questioned.

Fig. A.3.1. The Genealogical Structure of Genesis

		<i>toledot Structure</i>	<i>Genre</i>	<i>Outline</i>
		Preface. Biblical Worldview Foundations (1:1–2:3)		I. Preface. <i>The Blessing-Commission</i> : Humanity’s Productive Kingdom-Purpose as God-Imagers (1:1–2:3)
1	i	These are the <i>toledot</i> of the H and E (2:4–4:26)	N (+GL/S)	
2A	ii	This is the book of the <i>toledot</i> of Adam (5:1–6:8)	GL (+N)	II. <i>The Need for Blessing</i> : Humanity’s Perversion & the Merciful Kingdom Promise of a Curse-Overcoming Seed (2:4–4:26)
	iii	These are the <i>toledot</i> of Noah (6:9–9:29) And these are the <i>toledot</i> of Noah’s Sons (10:1–11:9)	N GS (+N)	
2B	iv	These are the <i>toledot</i> of Shem (11:10–11:26)	GL	III. <i>The Hope for Blessing</i> : Humanity’s Merciful Preservation & Provision for Kingdom Blessing (5:1–50:26)
		And these are the <i>toledot</i> of Terah (11:27–25:11)	N (+GS)	
And these are the <i>toledot</i> of Ishmael (25:12–18)		GS		
And these are the <i>toledot</i> of Isaac (25:19–35:29)		N		
		And these are the <i>toledot</i> of Esau (36:1–8; 36:9–37:1)	GS (+N+GS)	A. <i>The Missional Blessing Renewed</i> (5:1–11:9)
	v	These are the <i>toledot</i> of Jacob (37:2–50:26)	N (+GS+N)	1. The Perpetuation of Kingdom Hope from Adam through Noah in the Context of Threat (5:1–6:8)
KEY: N = Narrative; GL = Linear Genealogy; GS = Segmented Genealogy				
Main Theme				
The means by which God’s blessing-commission of kingdom advancement will be fulfilled in a cursed and perverted world is through an ever-expanding God-oriented, hope-filled, mission-minded community, climaxing in a single king in the line of promise who will perfectly reflect, resemble, and represent God and who will definitively overcome all evil, thus restoring right order to God’s kingdom for the fame of his name.				
B. <i>The Agency for Blessing Declared</i> (11:10–50:26)				
1. The Perpetuation of Kingdom Hope from Shem through Terah & the Merciful Provision for Universal Kingdom Blessing through Abraham & His Seed (11:10–37:1)				
2. The Promised Line’s Preservation & the Developing Kingdom Hope for a Royal Deliverer (37:2–50:26)				

- c. The Chronicler’s tracing Israel’s ancestry back to Adam (1 Chr 1:1) suggests a very late conviction in the veracity of the biblical portrayal in Genesis. The same can be said of Luke’s connecting Jesus’ lineage back to Adam, the son of God (Luke 3:8).
 - d. The prophet Hosea’s reference to Adam may well have applied Adam’s sin in the garden to Israel’s present problem (Hos 6:7).
 - e. Both Jesus and Paul unquestionably treated Adam and Eve as historical figures: marriage stems from the beginning of creation (Mark 10:13), Adam and Eve’s son Abel was the Bible’s first martyr (Luke 11:51), death reigned from Adam to Moses (Rom 5:14); whereas Christ is the channel for life to mankind, Adam was the channel of death (1 Cor 15:22); Adam was created before Eve (1 Tim 2:13), whereas Eve was deceived first (1 Tim 2:14).
 - f. Jude also treated the genealogies stretching from Adam as historical (Jude 14).
4. *Ancient near eastern parallels would also suggest we are dealing with real historical characters and not human literary fictions.*
 - a. Apart from royal inscriptions and myths about gods, oriental narratives fall into three categories:
 - i. *Autobiographies*, and occasionally biographies, are written close to the events described and recount events in a straightforward, non-miraculous style. Examples of this type would be the Egyptian stories of Sinuhe (ca. 1930 B.C.) and Wen-Amon (ca. 1075 B.C.).⁵

⁵ANET, 18–22, 25–29.

- ii. *Historical legends*, like the Mesopotamian epic of Gilgamesh (ca. 2800 or 2500 B.C.)⁶ or the Egyptian Tales of the Magicians (ca. 1600 B.C.),⁷ deal with historical figures, but they are written centuries later and are full of fantastic deeds, which appear more the product of imaginative storytellers.
 - iii. Finally, purely *fictional stories* describe adventures and fantasies about people who never existed. The Egyptian Story of Two Brothers (13th cent. B.C.) would be an example of this group.⁸
- b. Kenneth Kitchen has noted that the patriarchal narratives line up somewhere between the first and second types of oriental narrative, though closer to the first. “In sober content and mode of expression, they are clearly closest to the first category.... They share their third person narrative form with occasional texts of the first category and all texts of the second group—but entirely lack the fantasy-embellishments of the second group.”⁹ The talking serpent and anthropomorphic portrayal of God in the Garden appear no more fantastic than the smoking fire pot of Gen. 15, the three visitors in Gen. 19, the burning bush in Exod 3, or Balaam’s talking donkey in Num 22. As such, Gordon Wenham’s words about the patriarchal narratives should hold true to the early chapters of Genesis as well: “[E]ven if we were to class them as legends, rather than as biographies, oriental parallels would suggest we are dealing with real historical figures, not make-believe.”¹⁰

C. Support from Scripture that EC is not a justifiable conclusion when the biblical material is allowed to speak on its own terms. (Some of what follows is taken from Grudem, *Systematic Theology*, 276–79; cf. Moreland, Meyer, Shaw, Gauger, and Grudem, *Theistic Evolution: A Scientific, Philosophical, and Theological Critique* [Wheaton, IL: Crossway, 2017]).

- 1. Scripture teaches that God’s creative acts were purposeful rather than random, displaying at every stage intelligent design.
 - Gen. 1:21, 24–25. So God created the great sea creatures and every living creature that moves, with which the waters swarm, according to their kinds, and every winged bird according to its kind. And God saw that it was good....²⁴And God said, “Let the earth bring forth living creatures according to their kinds—livestock and creeping things and beasts of the earth according to their kinds.” And it was so.²⁵And God made the beasts of the earth according to their kinds and the livestock according to their kinds, and everything that creeps on the ground according to its kind. And God saw that it was good.

⁶*ANET*, 72–79, 83–90, 92–97, 514–515.

⁷Papyrus Westcar, cf. Lichteim, *Ancient Egyptian Literature I* (1973) 215–222.

⁸*ANET* 23–25.

⁹Kitchen, K. A., *The Bible in Its World: The Bible and Archaeology Today*, 65. It may be argued that the great ages represented in the early parts of Genesis clearly fall into the area of legend rather than history, because no one today lives that long. Let it first be noted that, however bizarre the high numbers seem in themselves, they are modest and precise in comparison to the tens of thousands of years’ attributed to the antediluvian kings of Mesopotamian tradition (cf. En-men-lu-anna, 43,200 years and Ubar-tutu, 18,600 years; cited in K. A. Kitchen, *Ancient Orient and Old Testament*, 40). Furthermore, in view of the closest ancient Oriental analogy, Enmebaragisi, king of Kish, Kitchen notes that the large figures for lives or reigns have no direct bearing on the historicity of the person. Though some may reject the Sumerian King List figure for his 900-year reign, because he left behind him Sumerian inscriptions, we must count Enmebaragisi as historical (*ibid.*).

¹⁰Wenham, G. J., *Genesis* 16–50, xxii.

2. Scripture suggests that God’s creative word brought about an *immediate response*: “and it was so” (Gen. 1:3, 7, 9, 11, 15, 24, 30; cf. Ps. 33:6, 9).
 - Psa. 33:6, 9. By the word of Yahweh the heavens were made, and by the breath of his mouth all their host....⁹For he spoke, and it came to be; he commanded, and it stood firm.
3. For plants and animals to reproduce “according to their kinds” (Gen. 1:11, 24) suggests that God made many types of plants and animals and that there would be limits to the kind of change that could come about through genetic mutation.
4. God’s *present* active role in creating and forming every living thing is incompatible with an evolutionary framework.
 - a. God creates every human in womb.
 - Psa. 139:13. For you formed my inward parts; you knitted me together in my mother’s womb.
 - b. God causes every birth defect and sickness.
 - Ex. 4:11. Then Yahweh said to him, “Who has made man’s mouth? Who makes him mute, or deaf, or seeing, or blind? Is it not I, Yahweh?”
 - Deut. 32:39. See now that I, even I, am he, and there is no god beside me; I kill and I make alive; I wound and I heal; and there is none that can deliver out of my hand.
 - c. God causes all vegetation to grow.
 - Psa. 104:14. You cause the grass to grow for the livestock and plants for man to cultivate, that he may bring forth food from the earth.
 - Matt. 6:30. But if God so clothes the grass of the field, which today is alive and tomorrow is thrown into the oven, will he not much more clothe you, O you of little faith?
 - d. God gives all food to every living thing.
 - Matt. 6:26. Look at the birds of the air: they neither sow nor reap nor gather into barns, and yet your heavenly Father feeds them. Are you not of more value than they?
 - Psa. 104:21. The young lions roar for their prey, seeking their food from God.
 - Psa. 104:27–30. These all look to you, to give them their food in due season. ²⁸When you give it to them, they gather it up; when you open your hand, they are filled with good things. ²⁹When you hide your face, they are dismayed; when you take away their breath, they die and return to their dust. ³⁰When you send forth your Spirit, they are created, and you renew the face of the ground.
5. The special creation of Adam, and Eve from him, is most naturally seen to counter EC.
 - a. Mankind’s distinction from the animals is stressed in many ways:
 - i. In humanity alone is created in the image of God (Gen. 1:26).
 - ii. Mankind is made “according to God’s likeness” (1:26) whereas every sea creature, bird, and land animal is made “according to its kind” (1:21 [2x], 25 [3x]; cf. 1:11, 12 [2x], 24, 25).
 - iii. No animal was considered a suitable helper for Adam (2:20; cf. Deut. Lev. 18:23; 27:21).
 - iv. Psalm 8 places mankind at the pinnacle of creation, just lower than the heavenly beings, and 1 Corinthians 15:39 emphasizes the distinction of human flesh from that of every other creature.
 - Psa. 8:4–8. What is man that you are mindful of him, and the son of man that you care for him. ⁵Yet you have made him a little lower than the heavenly beings and crowned him with glory and honor. ⁶You have given him dominion over the works of your hands; you have put all things under his feet, ⁷all sheep and oxen, and also the beasts of the field, ⁸the birds of the heavens, and the fish of the sea, whatever passes along the paths of the seas.

- 1 Cor. 15:39. For not all flesh is the same, but there is one kind for humans, another for animals, another for birds, and another for fish.
- v. While husband/Adam (2:7) and the land animals and birds (2:19) are formed from the ground, the human wife is formed from one of man's ribs (2:21–22).
 - b. Adam and Eve appear to have been created physically mature, able to sustain themselves apart from any other human agency, able to serve and guard the garden (2:15), able to speak (2:23), able to enjoy marriage and sexuality (2:23–25), and, at a very early stage, able to write books (5:1); however, their initial lack of knowledge pertaining to good and evil suggests moral immaturity (cf. Deut 1:39).
 - c. Tim Keller affirms the historical Adam and Eve, while maintaining the evolution of Adam and special creation of Eve (see <https://biologos.org/articles/creation-evolution-and-christian-laypeople/>). He finds most compelling the view of British evangelical Derek Kidner (*Genesis*, TOTC [Downers Grove, IL: InterVarsity Press, 1967], 28–30), who suggests:
 - i. That the being who became Adam under the hand of God first evolved, but Eve did not.
 - ii. That this couple was placed into the Garden of Eden as covenantal representative heads of the whole human race.
 - iii. That their creation in God's image and their fall affected not only their biological offspring but all other contemporaries (hominids) who at a certain point of development were equally counted as image bearers but were subject to Adam's headship.

Kidner's view attempts to account for both the continuities between animals and humans that some scientists propose as well as the discontinuities that Scripture describes. Only human beings are in God's image, have fallen into sin, and will be saved by grace. This "compromise" view identifies why EC is potentially a second-tier and not first-tier issue.

D. What about the dinosaurs?

1. *Dinosaurs and humans appear to have co-existed peacefully before the fall.* While naturalistic evolutionists normally posit at least five ice ages that progressively killed off the dinosaurs well before humanity ever arrived on the scene, the plain reading of the biblical text would suggest otherwise—mankind was created alongside the sea creatures and land animals (Gen 1:20–25 with 1:26–28; 2:19), which would imply that humans and dinosaurs co-existed in the earliest days. Even if, as any old earth model demands, there was animal death and suffering before the fall, it seems clear that the diet of the animals did not include humans prior to Genesis 3. That is, dinosaurs would not have been a danger to humans prior to the fall, for every creature knew its place under God's right order of sovereign rest (2:1–3; cf. Ps 132:7–8, 13–14). In this order, humans had been placed at the top of the food chain, called by God to serve as agents of his oversight, control, provision, and protection of the world, including the animal kingdom (Gen 1:28; 2:15; Ps 8:6–8[7–9]). A breakdown of various texts is as follows:
 - a. God's care: Pss 104:14, 21, 24, 27; 145:9; Matt 6:26; Luke 12:24

- b. Mankind’s care: Exod 20:10; 23:4–5, 12; Deut 22:6–8; 25:4; Prov 12:10; Matt 12:11–12)
- 2. *The threat of animals hurting humans is part of the curse.* Throughout Scripture, blessing is realized where animal predation does not threaten mankind or domesticated animals, whereas curse is experienced where humans and domesticated animals are put in danger.
 - a. Humans: Ps 104:23; Deut 7:22; Judg 14:5; 2 Kgs 17:25
 - b. Animals: 1 Sam 17:34–35; Isa 31:4; Amos 3:12

In light of these, it seems most likely that it was the fall of Genesis 3 that unleashed against humans a torrent of beastly, “Jurassic-Park”-like activity—activity that God appears to deem violent and wrong, for it puts the preservation of his image on earth in jeopardy. This is seen most clearly in Genesis 6–9.

- 3. *The flood judgment appears to have been partially due to animal violence against humans.* It is most likely the corrupt, beastly predation of animals against humans that, along with human sin, brought about the flood judgment. Notice how Genesis 6 addresses the reason for the flood. While humanity, as head of creation, led the atrocities (i.e., “the wickedness of man was great in the earth,” Gen 6:5), the flood was brought about by “*all flesh*” that “had corrupted their way on the earth” (6:12). Therefore, God said to Noah, “I have determined to make an end of *all flesh*, for the earth is filled with violence through them” (6:13). The rest of the chapter and the next make clear what *all flesh* is:
 - a. 6:19 – “And of every living thing of all flesh, you shall bring two of every sort into the ark.”
 - b. 7:15 – “They went into the ark with Noah, two and two of all flesh in which there was the breath of life.”
 - c. 7:21 – “And all flesh died that moved on the earth, birds, livestock, beasts, all warming creatures that swarm on the earth, and all mankind.”

The flood was brought about not only because of the violence and wickedness of mankind but also because of the violence of the animals. Because the term “violence” is elsewhere restricted to human violence against humans (the only potential exception is Jonah 3:8) and because predatory activity between animals is elsewhere not viewed as a problem but rather God’s good order (Ps 104:21; Job 38:39–41), it seems likely the animal violence that is condemned is likely that against humans. Human deaths due to animal predation appear to have been an increasing problem since the fall, when the animal kingdom was cursed along with the serpent (though he “above/more than” all other beasts, Gen 3:14). This explains why only after the flood does God change humanity’s diet, so that animals might begin to fear people: “The fear of you and the dread of you shall be upon every beast of the earth and upon every bird of the heavens, upon everything that creeps on the ground and all the fish of the sea. It you hand they are delivered. Every moving thing that lives shall be food for you. And as I gave you the green plants, I give you everything” (Gen 9:2–3). Such a move has a direct connection to the preservation of the image of God in humans: “And for your lifeblood I will require a reckoning: from every beast I will require it. . . . Whoever sheds the blood of man, by man shall his blood be shed, for God made man in his image” (Gen 6:5–6).

4. *Dinosaurs probably became extinct due either to destruction by humans or to climate change.* All of this sets us up for the departure of dinosaurs. It seems likely to me that they were part of the problem that sparked the need for the flood, but I see no reason why they would not have been preserved along with all other air-breathing creatures on the ark. As such, while the Bible is not explicit, it seems most likely their extinction happened after the flood due to one of two factors:
- a. *Destruction by humans* due to the danger of the dinosaurs themselves; remember: early on there would have only been two of every kind and probably young ones to fit on the ark, so their elimination would have been much easier.
 - b. *Climate change* (e.g., an ice-age), which many scientists affirm would happen in the wake of a catastrophe like the one described in the Bible. We know the flood was caused not only by rain but also, and even more significantly, when “the fountains of the great deep burst forth” (Gen 6:11; 8:2; cf. Amos 9:6; Prov 8:28). This suggests high volcanic activity, which would increase the temperature of waters and in turn drastically alter the earth’s climate (for a popular-level, contemporary example, see the movie “The Day After Tomorrow”). The eradication and extinction of the dinosaurs may have occurred progressively and perhaps even over a long period of time (see the accounts on multiple continents of St. George’s dragon in the Middle Ages).

II. An Assessment of Genesis 1:1–2:3

A. Different Interpretations of Genesis 1:1–2:3 from the perspective of history and science

1. *24 Hour Mature Earth View:* God created all of physical creation out of nothing in six successive calendar days. DeRouchie is a YEC, affirming that God created a mature earth in six 24-hour periods in a literal week and that the earth is extremely young—6,000–10,000 earth-years old.
2. *Day-Age View:* God created all of physical creation out of nothing in a chronological progression of ages spanning an indefinite period of time.
3. *Framework View:* God created all of physical creation out of nothing, but Genesis 1:1–2:3 portrays this move of God through a literary, temporal framework and topical arrangement that may or may not have anything to do with actual chronology.
4. *Non-material, Functional View:* In Genesis 1:1–2:3, God is not creating the material universe but is instead giving functions to already existing matter over six successive days (John Walton, *The Lost World of Genesis One*).
5. *Promised Land View:* Genesis 1:1 speaks of God creating the universe out of nothing, but Genesis 1:2–2:4 testify to his preparation of the Promised Land/Garden of Eden for humanity (John Sailhamer, *Genesis Unbound*).

B. Initial support for a 24-hour mature earth view

1. “*Day*” and “*week*” imagery in Gen. 1:1–2:3. The use of *yom* with the refrain “there was evening and there was morning” (Gen. 1:5, 8, 13, 19, 23, 31) along with the mention of light and darkness, day and night (1:5; cf. vv. 14, 16, 18), and the one week structure strongly suggests that the communicator of this

revelation was portraying the equivalent of 24-hour calendar days, even though the sun is not created until day 4 (Gen. 1:14–19). We thus have portrayed a divine work week, where God works for six days and rests on the seventh. The day-age theory does not seem to fit with the context.

2. *The Sabbath pattern:*

- a. While later meditations on creation (e.g., Ps 104) never refer to the “days,” the fact that Yahweh built Israel’s 6+1 pattern of life upon the pattern of the creation week seems best understood only if Israel was already aware of the 6+1 pattern of the creation week and viewed it as an actual as opposed to figurative reality.
- b. Even before God reveals himself at Sinai, Israel’s 6+1 Sabbath cycle is firmly set into her pattern of life (Exod. 16:23–29; cf. 20:11; 31:17). I suggest that knew about the Sabbath because it is not just a figure but was rather a pattern set in space and time at creation.
- c. A solar “day,” a lunar “month,” and a solar “year” are set by the earth’s daily rotation and its annual revolution around the sun. However, the structure of a seven day “week” has no astronomical connection. Why then did Israel keep this pattern?
- d. God calls Israel to keep the Sabbath cycle *because* his creation of the universe followed this structure (Exod. 20:10–11): “The seventh day is a Sabbath to Yahweh your God. On it you shall not do any work.... For in six days Yahweh made heaven and earth, the sea, and all that is in them, and rested on the seventh day.”
- e. Treating the original week as figurative supplies no actual analogy, but if God indeed created in six days and rested on the seventh, Israel gained a solid pattern around which to base their lives.

3. *A material and not just functional creation.*

- a. Contra Walton, the author of *Hebrews and Peter* treated the testimony of Genesis 1 as pointing to a material creation in space and time and not just to the assignment of functions: “By faith we understand that the universe was created by the word of God, so that what is seen was not made out of things that are visible” (Heb 1:3). “They deliberately overlook...that the heavens existed long ago, and the earth was formed out of water and through water by the word of God, and that by means of these the world that then existed was deluged with water and perished” (2 Pet. 3:5–6).
- b. We know that **ברא** is a unique verb, for Scripture only associates this action with God. Nevertheless, it does not mean “created out of nothing,” for it appears in Gen 1:27 and 5:1 in relation to mankind, whom we know the Lord formed from the dust (2:7). That **ברא** (“create”) and **עשה** (“make”) can be used synonymously seems evident from the context:
 - i. Genesis 2:3 asserts that “in it (i.e., the 7th day) God rested from all his works, which God created (**ברא**) by doing (**לעשות**)” (word-for-word in the Hebrew). The language here identifies the close association between God’s “creating” and his “doing.” They should not be distinguished as this pastor is claiming.
 - ii. Similarly, in 5:1 the verb **ברא** (“create”) is stylistically equivalent to the verb **עשה** (“make”), where it states, “When God *created* man, he *made* him in the likeness of God.”

- c. The significance of these facts comes when assessing the making of the luminaries on day 4.
- i. While the narrative associated with day 4 does not use *ברא*, it does use *עשה* as a synonym and emphasizes his making happened on day 4. Certainly, God may have already generated earlier the various elements that he used to make the Sun, but it was on day 4 that he shaped the Sun as the Sun.
 - ii. The passage distinguishes what God made on the fourth day (i.e., Sun, Moon, Stars) from what functions he appointed them for (i.e., to be for lights and to rule the day and night). I do not believe we should blur his making the Sun, Moon, and Stars from the roles he designed them to play.
 - iii. This final point highlights the theological significance of having light appear on day 1 but the luminaries only show up on day 4. Out of an Egyptian culture where *Shamash*, the sun god, was chief among the Egyptian pantheon, Genesis 1 refuses to link the “Greater Light” with the initiation of time, and it will not even use the Hebrew *shemesh* (“sun”) in the text. For Moses, the sun was *not* the ultimate source of light and heat and therefore life in this world. There is a greater power over the sun, as the ninth of the 10 plagues identified (Exodus 10:21–29). As will be the case at the end of time where “the city has no need of sun or moon to shine on it, for the glory of God gives it light, and its lamp is the Lamb” (Rev 21:23), so it was at the beginning. “In the beginning was the Word.... In him was life, and the life was the light of men. The light shines in the darkness, and the darkness has not overcome it” (John 1:1, 3–4). And again, “For God, who said, ‘Let light shine out of darkness,’ has shown in our hearts to give the light of the knowledge of the glory of God in the face of Jesus Christ” (2 Cor 4:6). I think both John and Paul emphasize in these texts the close association with Christ and the original light. The sun is merely a temporary agent; it was not needed at the start, and it will not be needed at the end. That God made the greater and lesser lights on day 4 is theologically significant, for it highlights that Yahweh God and not Shamash (the sun-god) is supreme and the ultimate giver of light.
4. The 24 hour mature earth view is the most natural reading of the text.

C. Challenges to a 24-hour mature earth view with responses

1. *Can we really have day and night without the sun?* **Response:**
 - a. The proposed problem relates to the scientific “doctrine” of uniformitarianism (i.e., that everything has always happened the same way).
 - b. The sun is not needed for day and night; what is needed is fixed light and a rotating earth.
 - c. In the new heavens and earth “night will be no more” and people “will need no light of lamp or sun, for the Lord God will be their light” (Rev 22:5).
 - d. The way John opens his Gospel by echoing Genesis 1:1 and by stressing the living Word’s nature as light and life suggests John saw the divine Son as the light that sustains creation; the sun becomes merely an agent.
 - *John 1:1–5*. In the beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God. All things were made through him, and without him was not any thing made that was made. In him was life, and the life was the light of men. The light shines in the darkness, and the darkness has not overcome it.
 - e. Paul too identifies the light of Christ with the initial creation event.

- 2 Cor 4:6. For God, who said, “*Let light shine out of darkness,*” *has shone in our hearts to give the light* of the knowledge of the glory of God in the face of Jesus Christ.
- f. Conclusions:
- i. Having day and night without the sun is not a problem, for the text portrays God as the sustainer and source of light.
 - ii. Within the creation account, light is never “made”; it simply appears in the created sphere, which may point to light finding its source in God.
 - iii. God can choose when to manifest his light in this world. He is still “light” today, yet we have darkness, both material and spiritual. As such, I believe that when God chose to create the world, he began by creating matter without form that he then further shaped. At this time, darkness covered the creation, but then he awakened the world out of its slumber with a spark of illuminating and life-giving energy (all to testify to how light overcomes darkness). Later on Day 4, he added the greater light (i.e., the sun) to be the physical agent through which he would shine his reflective glory. Nevertheless, he started creation without the physical sun in order to testify that it was indeed him and not the sun that was the ultimate source of life (John 1:1–4; 2 Cor 4:6).
 - iv. Verse 2 describes the state of the earth at the start of Day 1 (when God initially declared matter into existence), but it’s verse 3 that describes the primary creative action of God on this day—he said, “Let there be light, and there was light.” God’s Spirit was already “hovering” over the waters, but in v. 3 this Spirit began to burn with glowing, life-giving power. Significantly, Deut 32:11 supplies the only other use of this verb in the Pentateuch (“hover/flutter”), and in the latter text it refers to the pillar of *fire* by night and cloud by day. As Israel moved through the wilderness out of Egypt and en-route to the Promised Land, the glory cloud cut through the darkness with light, illuminating their path and reminding them that God was in control (Exod 13:21–22; 14:19–20, 24; 24:16–17; 40:38; Num 9:16–17; Deut 1:33; 5:22).
2. *Couldn’t “day” just mean an indefinite period of time?* **Response:**
- a. The Hebrew *yom* (“day) can refer to:
 - i. Daylight (1:5)
 - ii. A 24-hour period (1:5, 8, 13, 19, 23, 13)
 - iii. An indefinite period (2:4, which is at the start of the next unit and not part of Gen. 1:1–2:3).
 - b. There is little evidence for sense iii in Gen 1:2–3.
 - c. Sense iii does not explain “evening and morning” language.
3. *Even if you have a seven day work-week presented, don’t the literary features of the text suggest it is not a chronological, historical presentation?* **Response:**
- a. I affirm the literary artistry of Gen 1:1–2:3:
 - i. The repetitive narrative pattern:
 - (1) “And God said...”
 - (2) “And it was so...”

- (3) “And God made...”
 - (4) “And God did...”
 - (5) “And God called...”
 - (6) “And God saw that it was good”
 - (7) “And God blessed ... saying”
 - (8) “And there was evening, and there was morning”
- ii. The literary framework:

The Formless Takes Shape (Uninhabitable > Habitable; Static Regions/ Creation Kingdoms)	The Void Becomes Filled (Uninhabited > Inhabited; Mobile Occupants/Creature Kings)
Day 1: Light	Day 4: Luminaries
Day 2: Skies & Seas	Day 5: Birds and Sea Creatures
Day 3: Land & Vegetation	Day 6: Land animals and humans
Day 7: The Creator King Rests	

- iii. The use of the article only at Day 6 in the day-ending formula:
- (1) “A first day”
 - (2) “A second day”
 - (3) “A third day”
 - (4) “A fourth day”
 - (5) “A fifth day”
 - (6) “**The** sixth day”
- iv. Numerous patterns in multiples of seven
- (1) 7 days
 - (2) “God” as explicit subject = 35x
 - (3) “Earth” = 21x
 - (4) “Good” = 7x
 - (5) “Heavens” + “expanse” + “separation” = 21x
- v. A selective portrayal without a goal of describing everything
- b. Literary artistry does not mean a-historical:
- i. The exodus accounts in Exodus 14–15
 - ii. The story of Deborah and Barak’s defeat of Sisera in Judges 4–5
- c. Genesis 1:1–2:3 uses the normal narrative verb pattern in Hebrew.
- d. The poetic elements set us up for potential “discrepancies” between Genesis 1–2.
4. *What do you do with the chronological challenges between Genesis 1–2?*
- a. **Challenge 1:** Genesis 2:19 indicates that God created the birds with the other animals, but in Genesis 1 the creation of the birds (and fish) occurs on day five (1:20–21) and the creation of the remaining animals occurs on day six (1:25).
- i. Genesis 1 has birds > animals > mankind;
 - ii. Genesis 2 has the man > animals > birds > the woman.
- Response:** Genesis 2:19 does not state that God created birds and land creatures on the same day—only that he had made all of them. That the order animals then birds is in reverse order from Genesis 1 may be only stylistic.

- b. **Challenge 2:** The creation of man in Genesis 2:7 is distinguished from the creation of woman in 2:21–22. These accounts are separated from each other by the construction of the garden in 2:8–17 and God’s making of the animals in 2:19–20. In Genesis 1, however, the creation of man *and* woman (together!) in 1:27 follows the creation of the animals in 1:25. **Response:** God creates both land animals and humans on the same day; the rhetorical purpose of Genesis 1 seems to require that the animals and humans be addressed as units, allowing the focus on humanity to be found in the climax. On the other hand, the introductory nature of Gen 1:1–2:3 calls us to read chapter 2 in light of what precedes. As such, the context supplies enough of a clue that we should translate the narrative *wayyiqtol* verb 2:19 as past perfect (ESV) and not simple past (NASB). Thus the animals do not need to be created between man and woman.
- i. **ESV:** Now out of the ground the LORD God *had formed* every beast of the field. . . .
 - ii. **NASB:** Out of the ground the LORD God *formed* every beast of the field. . . .
- c. **Challenge 3 (Synthesis):** Were plants created on Day 3 or Day 6 (Gen 1:11–12; 2:5)? Genesis 2:5 indicates that irrigation and cultivation were the necessary prerequisites for the appearance of vegetation. In Genesis 1, however, vegetation preceded man’s creation by some three “days” (cf. 1:11). **Response:** Gen 2:5 mentions a new kind of plant that God had not yet brought forth (due to its link with the curse) and clarifies that the “normal” (under-curse) conditions you and I expect in this post-fall world had not yet appeared.

Gen 2:5–7. Now no *shrub of the field* was yet in the earth, and no plant of the field had yet sprouted, for the LORD God had not sent rain upon the earth, and there was no man to cultivate the ground. But a mist used to rise from the earth and water the whole surface of the ground. Then the LORD God formed man of dust from the ground, and breathed into his nostrils the breath of life; and man became a living being.

- i. Gen 1:11–12 states that God brought forth two kinds of vegetation:
 - (1) Small plants yielding seed = *Whole grain plants* like barley, corn, kamut, rice, rye berries, sorghum, spelt, and wheat berries
 - (2) Fruit trees = *Trees bearing fruit*
- ii. While 2:9 tells us there was *in the garden* “every tree that is pleasant to the sight and good for food,” Gen 2:5 states that two realities *of the field* had not yet happened because these demanded rain and cultivation:
 - (1) No *bush of the field* = uncultivated shrubs found in remote wilderness regions (see Gen 21:15; Job 30:4, 7; cf. “thorns and thistles,” 3:18);
 - (2) The small plants (yielding seed) *of the field* had not yet sprouted (NIV) grain.
- iii. Genesis 2 distinguishes the “garden” from the “field.”
 - (1) God created man from the “ground” and placed man into the “garden” (2:7).

- (2) God brought man in the garden “every beast of the field” to name (2:19).
 - (3) God’s curse against humanity meant:
 - (a) That the earth would bring forth thorns and thistles for mankind and that he would now eat “the plants of the field” (3:18; cf. 2:5).
 - (b) That mankind would now be kicked out of the garden “to work the ground” (3:23; cf. 2:5)
 - iv. For the reader living in the post-fall world, Genesis 2:5 is signaling that the rainy season had not yet started, that the curse had yet to come, that “normal” world as we know it had yet to begin, and that God anticipated the fall to happen quickly.
- d. **Challenge 3 (Expanded):**
- i. The question at hand relates to Genesis 2:5 and the order of creation events that is suggested by its declaration. In Genesis 1, God created vegetation made up of “plants” and “trees” on Day 3 (1:11–12) and mankind on Day 6, yet in Genesis 2:5 the “plants of the field” are not yet sprouted because there was no rain and no man to work the ground. Is this a clear signal that Genesis 1 is not to be read chronologically? A handful of observations suggest that Genesis 2:5 cannot be used to thwart a chronological reading of Genesis 1.
 - ii. Genesis 2 distinguishes things of the “garden” from things of the “field,” the latter of which is the location of mankind’s curse *outside* the garden (3:18, 23). God originally created man from the dust of the ground (2:7–8; 3:23) and then he placed him *into* the garden he had made (2:7–8). There is, therefore, a distinction between the garden and the rest, and the garden is treated as the emanating center of all life. From the same ground God made the man he had also made “the beasts *of the field* and every bird of the heavens,” and God gathered representatives from these creatures to the garden so that the man could name them (2:19). While there was “no bush of the field” in the land and “no small plant of the field” had yet sprouted (2:5), *within the garden* God had caused to spring up “every tree that is pleasant to the sight and good for food” (2:9). The original ideal vision was that as the man and his helper would “serve and guard” the garden (2:15), both humanity and garden would be ever-expanding until God’s glory through his image bearers would overcome the field and be displayed throughout the whole world as the waters cover the sea (Gen 1:28; cf. Num 14:21; Isa 11:9; Hab 2:14; Ps 72:19). The vision was always that the garden would overcome the field.
 - iii. In Genesis 9:3, we read, “Every moving thing that lives shall be for food to you. As the green plant, so I give to you everything.” The “everything” clearly refers to the beasts and birds, creeping things and fish, for the previous verse declares that all these have been delivered into man’s hand (9:2). The comparison, therefore, of “as the green plant, so now everything” supports the view that pre-fall, humans were

vegetarian. The “green plant” is an echo of 1:30. In 1:29 God had told mankind that he gave them “every plant yielding seed” for food, and in 1:30 he declared “every green plant” to be food for the beasts, birds, and creeping things—specifically “everything that has the breath of life.”

- iv. God certainly created “plants” throughout the earth on Day 3 (1:11–12), and it is these “plants” that he gave as food for all terrestrial life—both inside and outside the garden (1:29–30; cf. 2:9), sustaining them through a mist (2:6) and through the water source that flowed out of Eden (2:10). Nevertheless, Genesis 2:5 specifies a certain type of bush and plant that had *not yet* sprung up—namely those “of the field.” That is, there were specific bushes and plants *outside* the garden that had not yet sprouted, and the reason given is that they were of a sort that (1) demanded rain and (2) demanded cultivation. Signals in the text suggest that the point of 2:5 is to highlight for the reader that chapter 2 address a pre-fall reality and that there were certain elements in the fallen world not yet realized in the pre-fall world.
- (1) Genesis 2:5 tells us that “no small plant *of the field* had yet sprung up.” A plural form of this phrase shows up again in direct relation to the curse on the ground in 3:18: “thorns and thistles it shall bring forth for you; and you shall eat *the plants of the field*.” As such, it is clear that the “field” is here contrasted with the “garden” and identifies the sphere wherein the curse flourishes. It is also the “beasts *of the field*” that God cursed following mankind’s sin, though not as greatly as the serpent himself (3:14; cf. 3:1).
 - (2) The parallel phrase to “the plant of the field” in 2:5 is “bush of the field,” and the term “bush” specifically points to uncultivated shrubs found in remote wilderness regions, as in the bush under which Hagar placed Ishmael once her water ran out (21:15) and the bushes that serve as food for those Job declares have “hard hunger” and who “gnaw the dry ground by night in waste and desolation” (Job 30:1–8, esp. 3, 7). Such bushes sound distinctly akin to the “thorns and thistles” that would torment mankind’s toilsome work *outside* the garden (3:17–19).
 - (3) The phrase in Genesis 2:5 “there was no man to work the ground” anticipates 3:23, where we are told God sent the man “out from the garden of Eden to work the ground from which he was taken.” This parallel suggests that “the plant of the field” of 2:5 were specifically those that would only grow through cultivation *after* the curse and that “the bush of the field” in 2:5 were specifically the “thorns and thistles” that were part of the curse and that would give humanity trouble.
 - (4) The statement in 2:5 that “the LORD God had not caused it to rain on the land” probably points in two directions: (1) It identifies that creation occurred in the dry season of the Near

East (May–Sept) before the autumn early rains. (2) It highlights that Adam and Eve’s time in the garden was short and that God anticipated the fall was imminent from the very beginning. By the time fall rains came, mankind would already be outside the garden experiencing exile from God.

- v. In light of the above, we should *not* understand 2:5–8 to suggest that there were no plants for food at the time God created mankind; no, God had already created them on Day 3 (1:11–13). Indeed, both in and outside the garden was loaded with all that humanity and animals would need (1:29–30; 2:9). However, what was not yet growing were the plants and bushes “of the field”—those outside the garden that were specifically associated with the curse.
 - vi. Genesis 2:5–8 is intentionally designed to place the discussion of Genesis 2 in a pre-fall state. By mentioning “no bush of the field,” “no plant of the field,” and “no man to work the ground,” Moses intentionally signals for the reader that *the fall has not yet happened*. The reader needs to know that the pain and hardship he presently endures came from somewhere, and the story that follows will explain it. Before such toil and hardship, though, God had planted a garden and placed the man there with a distinct purpose. This is the point of the story.
5. *Could so much have really happened on Day 6?* Specifically, In Genesis 2:20, it is recorded that the man named *every* beast, bird, and living creature of the field as they were presented to him by God in an attempt to identify the one who would be his helper. Given that this naming event occurred prior to the creation of the woman, a harmonization with Genesis 1 appears to require that the man named every living creature that was created by God in less than a single, solar day according to the solar-sequential hypothesis. How are we to understand this?
- a. Day 6 includes all that happens in Gen 1:26–30 and 2:4–25:
 - i. God creates animals;
 - ii. God creates the man;
 - iii. God tells the man the parameters for life;
 - iv. Man names all the animals;
 - v. God creates the woman.
 - vi. The man and woman get married.
 - b. **Response** (Adapted from Professor Joe Rigney):
 - i. Side Note: “According to their kinds” need not correspond to our modern categorization of species, so Gen 2:19–20 need only mean Adam named broad categories of animals—e.g., “dog” instead of “black lab.”

6:00 AM – God makes the animals (Gen 1:24–25)

6:01 AM – God takes counsel with himself to make man (Gen 1:26)

6:02 AM – God makes Adam from the dust of the ground (Gen 2:7)

6:05 AM – God starts to plant the Garden (Gen 2:8–9)

6:10 AM – The Garden is complete

6:11 AM – God puts Adam in the Garden (Gen 2:15)

6:12 AM – God warns Adam about the forbidden tree (Gen 2:16–17)
6:13 AM – Adam has breakfast
6:30 AM – God reveals plans for a helper (Gen 2:18)
6:31 AM – God brings the animals to Adam to name (Gen 2:19–20)
3:00 PM – Adam takes a nap (Gen 2:21)
3:25 PM – Adam wakes up, meets Eve, and the two get married (Gen 2:22–23)
3:29 PM – God blesses Adam and Eve with a commission (Gen 1:28–30)
3:30 PM – Two hours until sunset to be naked and unashamed (Gen 2:25)

- ii. What’s so hard about that?
- 6. *Day 7 identifies the “week” as heavenly, not earthly, time, and it never ends, so we shouldn’t consider Gen 1:1–2:3 as detailing earthly time?*
 - a. **Overview:**
 - i. The “evening and morning” pattern is lost in Day 7, suggesting it never ended.
 - ii. We already know that “heavenly time” is not the same as ours (Ps 90:4; 2 Pet 3:8).
 - iii. Hebrews 4:4–11 also suggests the day never ended: “For he has somewhere spoken of the seventh day in this way: ‘God rested on the seventh day from all his works.’ . . . It remains for some to enter it. . . . So then, there remains a Sabbath rest for the people of God, for whoever has entered God’s rest has also rested from his works as God did from hi. Let us therefore strive to enter that rest.”
 - b. **Response:**
 - i. The pattern of the work-week was over, so there was no reason to include the transition formula at the end of Day 7.
 - ii. John 5:17 states that both the Father and Son were “working” in the days of Christ, which suggests the original week came to an end.

D. Conclusions:

1. We should affirm that Genesis 1:1–2:3 accurately describes actual historical events, regardless of the level to which one sees literary and rhetorical artistry at work in the text. The Bible’s portrayal of reality past and future is done through various genres (e.g., historical narrative, prediction, apocalyptic), all of which are sermonic and dominated by theological selectivity and creativity.
2. The main purpose of Genesis 1:1–2:3 is to describe the nature, place, and purpose of God, of his world, and of humanity—all in contrast to the twisted worldviews of the post-fall age.
3. While Genesis 1:1–2:3 exhibits high levels of artistry highlighted through the Framework Hypothesis, it portrays the succession of God’s workweek in 6, 24-hour calendar days. More than just describing God’s designation of functions, Genesis 1 stresses God’s creation of the material world and the clarification of humanity’s place in it. Genesis 1 describes real history. God created and sustains all things through his Word, and God set mankind uniquely apart with mission climaxing in global worship.
4. The most natural reading of Genesis 1:1–2:3 is as chronological history, and Genesis 2–3 does not appear to contain anything that would contradict this original thesis.

III. A Biblical Case for a Young Earth

A. Introduction

1. *Methodology:*
 - a. At stake in the age of the earth question is faithful exegesis of the biblical text aligned with a faithful interpretation of the scientific data. Because no one but God was present at the beginning, and because the Bible is God's inerrant word, Scripture holds highest authority in answering questions of time and space. Scripture's teaching on a subject must bear guiding weight in assessing all matters related to the created sphere.
 - b. While God as creator, his purpose for creation, and the historicity of Adam and Eve as the first parents are non-negotiable for Christian belief, and while evolution is not seem to me to be a warranted biblical position, I think that the age of the earth is not among the central doctrines that should divide. Both young earth and old earth creationism are within the realm of Christian teaching (akin to credo or paedo baptism or varying millennial views). While I remain a convinced young earth creationist in light of the biblical data, there is no "silver bullet" biblical or scientific argument for my position, and old earth creationists can craft legitimate, thoughtful responses to each of my points. The weight of my case is its cumulative nature, and I question whether every claim I make can be legitimately falsified.
2. *Synthesis of my argument:*
 - a. **Genesis 1:1–2:3 places the creation of humanity within the first week of creation.** The most natural reading of the Bible's introduction points to a young earth.
 - b. **The NT closely associates the history of Genesis 2–4 with the beginning of the world.** Old earth models require either that mankind's creation be separated from the "beginning" by millions or even billions of years or that the Gen. 1:1 "beginning" stretch out for a period of time massively longer than all the time that has followed.
 - c. **Genesis' linear genealogies in Genesis 5 and 11 point to a recent humanity.** While some biblical genealogies are clearly selective (e.g., Matt. 1:1; 1:2–17), the genealogies in Genesis 5 and 11 are so specific that they resist a selective reading and thus require that humanity has existed a relatively short time.
 - d. **Mankind's station as the climax of creation and sole image of God and Adam's high role as head of the first creation supports a young earth.** It makes less sense to think that God allowed the bulk of creation to exist for millennia without its overseers.
 - e. **Scripture usually portrays the suffering and death of living creatures, including animals, as part of curse, so millions of years of animal death and suffering pre-fall seems unlikely.** God initially curses the world on account of human sin, so death and suffering in land animals and birds most likely resulted *from mankind's fall* and were not present before it, as all old earth models require.

- f. **The limiting of animal death in the eternal state as a restoring of Eden suggests that all terrestrial death began after the fall.** Specifically, because eating meat likely symbolizes Jesus's victory over the curse, the limiting of animal death in the eternal state to redeemed humanity's consuming of meat likely signals the restoring of Eden rather than an escalation beyond it and suggests that all terrestrial death began after the fall and that, therefore, the earth is young.

B. Biblical Support

1. **Genesis 1:1–2:3 places the creation of humanity within the first week of creation.** The most natural reading of the Bible's introduction points to a young earth.
 - a. The use of Hebrew *yom* with the refrain "there was evening and there was morning" (Gen. 1:5, 8, 13, 19, 23, 31) along with the mention of light and darkness, day and night, and the one week structure strongly suggest that the communicator of this revelation was portraying the equivalent of 24-hour calendar days, even though the sun is not created until day 4 (Gen. 1:14–19).¹¹ Mankind is here portrayed as being created on day 6 of God's first workweek. The day-age theory does not seem to fit this context, and the gap theory does not appear to be allowed by the Hebrew text.
 - b. While later meditations on creation (e.g., Ps 104) never refer to the "days," the fact that Yahweh built Israel's 6+1 pattern of life upon the pattern of the creation week (Exod 20:11) seems best understood only if Israel was already aware of the 6+1 pattern of the creation week (see 16:23–29) and viewed it as an actual as opposed to figurative or analogical reality (contra Jack Collins). Specifically, Israel's call to keep the Sabbath is grounded in God's original workweek, which is difficult to read analogically (20:10–11): "The seventh day is a Sabbath to Yahweh your God. On it you shall not do any work.... For in six days Yahweh made heaven and earth, the sea, and all that is in them, and rested on the seventh day."
 - c. In contrast to those like John Walton who argue that Genesis 1 only refers to the establishment of functions and not the actual creation of material *ex nihilo*, the text itself explicitly distinguishes the creation or shaping of materials and the assigning of functions (e.g., Gen. 1:15–18). Furthermore, other texts outside Genesis appear to plainly refer to Genesis 1 as pointing to a combined material-functional creation in space and time (Ps. 33:6–9; Zech 12:1; John 1:3; Heb. 11:3; 2 Pet. 3:5–6). Ps 8 specifically speaks of the heavens as the work of the divine craftsman's "fingers," which stands against his "ordaining/putting into place" the moon and stars (v. 3); here we have the distinction between material and functional. Just as the seven years of building Solomon's temple included both material and functional stage

¹¹ 2 Corinthians 4:6 suggests that the same light that shines into our hearts in spiritual rebirth was the light that God displayed during the first three days (before the sun). The withholding of the sun until day four testified that the sun is not the ultimate sustainer of life but only a (temporary) reflector of the glory of God in the face of Christ (see Rev. 21:23). Similarly, John 1:1–5 identifies Christ not only as the eternal Word that was at the beginning and through whom all things were made (John 1:1–3) but also as the one in whom was both life and a darkness-overcoming light (1:4–5): "In him was life, and the life was the light of men. The light shines in the darkness, and the darkness has not overcome it."

(so Walton himself, *The Lost World of Genesis 1*, 87), so too the seven days of building the creation temple would have included both material and functional processes.

- Gen. 1:15–18. And God *made* the two great lights—the greater light *to rule* the day and the lesser light *to rule* the night—and the stars. And God *set them* in the expanse of the heavens *to give* light on the earth, *to rule over* the day and over the night, and *to separate* the light from the darkness.
- Ps. 33:6–9. By the word of Yahweh the heavens were made, and by the breath of his mouth all their host. ⁷ He gathers the waters of the sea as a heap; he puts the deeps in storehouses. ⁸ Let all the earth fear Yahweh; let all the inhabitants of the world stand in awe of him. ⁹ For he spoke, and it came to be; he commanded, and it stood firm.
- Zech 12:1. Thus declares the LORD, who stretched out the heavens and founded the earth and formed the spirit of man within him.
- John 1:3. All things were made through him, and without him was not any thing made that was made.
- Heb. 11:3. By faith we understand that the universe was created by the word of God, so that what is seen was not made out of things that are visible.
- 2 Pet. 3:5–6. They deliberately overlook this fact, that the heavens existed long ago, and the earth was formed out of water and through water by the word of God, ⁶ and that by means of these the world that then existed was deluged with water and perished.

2. ***The NT closely associates the history of Genesis 2–4 with the beginning of the world.*** Old earth models require either that mankind’s creation be separated from the “beginning” by millions or even billions of years or that the Gen. 1:1 “beginning” stretch out for a period of time massively longer than all the time that has followed. The former discounts the NT link between the “beginning” of Gen. 1:1 and the creation of mankind in 1:26–28, and the latter forces a strange use of the term of “beginning,” wherein what happens in the “ninth inning” is still the “beginning.”¹²

- a. Jesus saw the institution of marriage as being closely linked to the beginning of creation (Mark 10:6; cf. Matt. 19:4, 8; see Gen. 2:21–25).
 - Mark 10:6. From *the beginning of creation*, God made them male and female.
- b. Jesus declared that Satan’s murderous activity (not just tendencies) through his deception of Eve was closely associated with the beginning of creation (John 8:44).
 - John 8:44. You are of your father the devil, and your will is to do your father’s desires. He was a murderer *from the beginning*, and has nothing to do with the truth, because there is no truth in him. When he lies, he speaks out of his own character, for he is a liar and the father of lies.
- c. Jesus linked this murderous, sinful activity with the promise that the offspring of the woman would stand in friction with the serpent and his offspring (1 John 3:8; cf. Gen. 3:1–6, 15).
 - 1 John 3:8. Whoever makes a practice of sinning is of the devil, for the devil has been sinning *from the beginning*. The reason the Son of God appeared was to destroy the works of the devil.
 - Gen. 3:15. I will put enmity between you and the woman, and between your offspring and his offspring; he shall bruise your head, and you shall bruise his heel.

¹² To counter this, some have suggested that the use of “latter days” or “last hour” including a two-millennia span is perhaps akin.

- d. Jesus saw the first human experience of tribulation as being located near the beginning of creation (likely referring to Cain’s killing of Abel) (Mark 13:19; cf. Matt. 24:21; see Gen. 4:8).
- Mark 13:19. For in those days there will be such tribulation as had not been *from the beginning of creation* that God created until now, and never will be.
- e. Jesus placed the martyrdom of Abel near the foundation of the world (Luke 11:49–50; cf. Matt. 23:35; see Gen. 4:8).
- Luke 11:49–50. The Wisdom of God said, ‘I will send the prophets and apostles, some of whom they will kill and persecute,’⁵⁰ so that the blood of all the prophets, shed *from the foundation of the world*, may be charged against this generation, from the blood of Abel to the blood of Zechariah, who perished between the altar and the sanctuary.
- f. The writer of Hebrews considered the “foundation of the world” to be the conclusion of the 6th day, placed humanity’s rebellion (for which Jesus suffered) very near this time, and contrasted this foundation with the “end of the ages” realized in the work of Christ (Heb. 4:3–4; 9:25–26).
- Heb. 4:3–4. For we who have believed enter that rest, as he has said, “As I swore in my wrath, ‘They shall not enter my rest,’” although his works were finished *from the foundation of the world*.⁴ For he has somewhere spoken of the seventh day in this way: “And God rested on the seventh day from all his works.”
 - Heb. 9:25–26. Nor was it to offer himself repeatedly, as the high priest enters the holy places every year with blood not his own, for then he would have had to suffer repeatedly *since the foundation of the world*. But as it is, he has appeared once for all at the end of the ages to put away sin by the sacrifice of himself.
3. ***Genesis’ linear genealogies in Genesis 5 and 11 point to a recent humanity.*** While some biblical genealogies are clearly selective (e.g., Matt. 1:1; 1:2–17), the genealogies in Genesis 5 and 11 are so specific that they resist a selective reading and thus require that humanity has existed a relatively short time. Note the following selection:
- Gen. 5:3–11. When Adam had lived 130 years, he fathered a son in his own likeness, after his image, and named him Seth.⁴ The days of Adam after he fathered Seth were 800 years; and he had other sons and daughters.⁵ Thus all the days that Adam lived were 930 years, and he died.⁶ When Seth had lived 105 years, he fathered Enosh.⁷ Seth lived after he fathered Enosh 807 years and had other sons and daughters.⁸ Thus all the days of Seth were 912 years, and he died.⁹ When Enosh had lived 90 years, he fathered Kenan.¹⁰ Enosh lived after he fathered Kenan 815 years and had other sons and daughters.¹¹ Thus all the days of Enosh were 905 years, and he died.
- a. The linear genealogies in Genesis 5 and 11 are unique in all of Scripture with respect to their detail.
- b. A number of the seemingly “father-son/grandson/great-grandson” relationships are shown elsewhere to be just that—e.g., Adam with Seth [Gen. 4:25], Noah with Ham, Shem, and Japheth [6:10], Terah with Abraham [11:31]).
- c. A solid explanation for the presence of specific ages is the messianic and missiological purposes of Genesis. Moses seems to have gone out of his way to show that God preserved the line of hope *in every generation* from Adam to Noah, from Shem to Terah, and from Abraham to Israel. The specified years all highlight the faithfulness of God to preserve his line hoping in the offspring promise. As such, leaving out generations would have gone against the apparent purpose.

- d. The ages in the genealogies point to humanity being around 6,000 years old.¹³
- e. Even if “son” at times means grandson or great-grandson (as can happen in Scripture), the specificity of the ages counters the likelihood of gaps.
- f. Question: But doesn’t Luke 3:36 indicate a gap in Gen 11:12 between Arpachsad and Shelah?

Gen 11:10–26	1 Chr 1:24–27	Luke 3:34–36
Shem	Shem	Shem
Arpachsad	Arpachshad	Arphaxad
?	?	Cainan
Shelah	Shelah	Shelah
Eber	Eber	Eber
Peleg	Peleg	Peleg
Reu	Reu	Reu
Serug	Serug	Serug
Nahor	Nahor	Nahor
Terah	Terah	Terah
Abram	Abram/Abraham	Abraham

- i. This is possible, but it would only indicate a single gap, not more.
- ii. However, it is also possible that (1) a statement regarding Kenan was originally part of Genesis 11 and accidentally dropped out during years after copying or that (2) Cainan was mistakenly added into Luke 3 (perhaps desiring to preserve the 10-generation pattern found in Genesis 5).

¹³ Kenton L. Sparks has asserted, “If we look closely at the chronological figures in Gen 5, we’ll find that these are certainly symbolic rather than literal. The final digit for each number is 0, 2, 5, or 7 in all cases but one. Given that the probability of random ages like this is on the order of .00000006%, it is clear that these numbers are not chronological. A comparison of these numbers with the ancient Near Eastern evidence suggests that in both cases—the biblical and Mesopotamian king lists—the numbers were derived from, or influenced by, astronomical and mathematical figures” (“Genesis 1–11 as Ancient Historiography,” in *Genesis: History, Fiction, or Neither*, ed. Charles Halton, Counterpoints [Grand Rapids: Zondervan, 2015], 120). He then explains his math: “One takes the probability of randomly selecting any of the four digits used (i.e., ‘4’) and raises it to the power equivalent to the number of random selections (18). This yields $.4^{18}$, or 6.87×10^{-8} ” (120 n. 12). The basic point Sparks is trying to make is as follows: The probability of getting a 0, 2, 5, or 7 on a ten-sided die (0–9) would be $4/10$ (or $.4$). The probability of getting any of those numbers twice in a row would be $(4/10) \times (4/10)$ or $.4^2$. The odds of getting only those four numbers 18 times would be $.4^{18}$. As a mathematician friend noted to me, there are two problems with Sparks’ assertion. First, his math is wrong, for he calculated the probability of 4 specific digits being the only ones that occur at the ends of 18 independent numbers, but unless he has shown that these 4 digits are of particular importance, he should be calculating the probability of *any* 4 digits being the only 4 digits. Second, while the probability of getting those exact four digits 18 times is very low, Sparks fails to consider that the numbers could have been rounded to the nearest 0 and 5 (beginning and middle of a decade) and then 2 and 7 (a rough quarter of a decade). Rounding would be the most honest history writing if there was some question regarding specifics, and it does not require that we read the numbers symbolically instead of literally. Naturally, the closer an account is to the writer, the more specific it would be, and this could explain the higher specificity in Genesis 11, which includes numbers ending in 0, 2, 3, 4, 7, and 9. With this, all the numbers would still be very accurate and not allow major gaps in any way.

- iii. Regardless, we are still not talking about massive gaps. The ages in Genesis 5 and 11 suggest a young humanity, and if God made humanity at the beginning—in the first week of creation, the universe is young in earth years.
4. ***Mankind’s station as the climax of creation and sole image of God and Adam’s high role as head of the first creation supports a young earth.*** It makes less sense to think that God allowed the bulk of creation to exist for millennia without its overseers.
- a. Genesis 1:1–2:3 associates all major “rulers” of the first creation with humanity:
- i. The luminaries separate day and night and establish the earth’s calendar (Gen 1:14), but they also serve as “signs” for humans that stress the surety of God’s promises (Gen 15:5; Jer 33:22).
 - ii. Humans are called to “fill the earth and subdue it” and to “have dominion over the fish . . . birds . . . and every living thing that moves on the earth” (Gen 1:28).
- b. Humans are the climax of creation and sole representatives of God on the earth, with some being chosen “in Christ before the foundation of the world, that we should be holy and blameless before him, having been predestined in love for adoption as sons through Jesus Christ . . . to the praise of his glorious grace” (Eph. 1:4–6).
- i. Only on this day is the definite article “the” added to the day-ending formula (“a first day, a second day, a third day, . . . *the* sixth day”).
 - ii. Day 6 gets the most literary space and includes the longest speeches.
 - iii. Only at the end Day 6 does God declare creation “very good” (Gen. 1:31).
 - iv. Only at Day 6 does God declare something he makes to be created in his image, giving humanity oversight over the world.
 - v. Scripture portrays the first man, Adam, as representative covenantal head over the first creation (Gen 2:15; Rom 5:18–19; 1 Cor 15:45).
- c. God’s oversight, provision, and protection of animals (Pss. 104:14, 21, 24, 27; 145:14–16; 147:9; Matt. 6:26; Luke 12:24) is significantly manifest through mankind (Gen. 1:28; 2:15; Ps. 8:6–8[7–9]).
- i. God cares and provides for the animals.
 - Ps. 104:14, 21, 24, 27. You cause the grass to grow for the livestock and plants for man to cultivate, that he may bring forth food from the earth. . . . ²¹ The young lions roar for their prey, seeking their food from God. . . . ²⁴ O Yahweh, how manifold are your works! In wisdom have you made them all; the earth is full of your creatures. . . . ²⁷ These all look to you, to give them their food in due season.
 - Ps. 145:14–16. Yahweh upholds all who are falling and raises up all who are bowed down. ¹⁵ The eyes of all look to you, and you give them their food in due season. ¹⁶ You open your hand; you satisfy the desire of every living thing.
 - Ps. 147:9. He gives to the beasts their food, and to the young ravens that cry.
 - Matt. 6:26. Look at the birds of the air: they neither sow nor reap nor gather into barns, and yet your heavenly Father feeds them. Are you not of more value than they?

- Luke 12:24. Consider the ravens: they neither sow nor reap, they have neither storehouse nor barn, and yet God feeds them. Of how much more value are you than the birds!
- ii. God calls humans to rule the animals (Gen. 1:28; Ps. 8:6–8[7–9]) and to serve and protect them (Gen. 2:15).
- Gen. 1:28. And God blessed them. And God said to them, “Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth.”
 - Ps. 8:6–8. You have given him dominion over the works of your hands; you have put all things under his feet, ⁷ all sheep and oxen, and also the beasts of the field, ⁸ the birds of the heavens, and the fish of the sea, whatever passes along the paths of the seas.
 - Gen. 2:15. Yahweh God took the man and put him in the garden of Eden to work it and keep it.
- iii. God calls humans to care for and preserve animals, though never in a way that detracts from an animal’s purpose of enhancing humanity’s existence.
- Exod. 20:10. The seventh day is a Sabbath to Yahweh your God. On it you shall not do any work, you, or your son, or your daughter, your male servant, or your female servant, or your livestock, or the sojourner who is within your gates.
 - Exod. 23:4–5. If you meet your enemy’s ox or his donkey going astray, you shall bring it back to him. ⁵ If you see the donkey of one who hates you lying down under its burden, you shall refrain from leaving him with it; you shall rescue it with him.
 - Exod. 23:12. Six days you shall do your work, but on the seventh day you shall rest; that your ox and your donkey may have rest, and the son of your servant woman, and the alien, may be refreshed.
 - Deut. 22:6–8. If you come across a bird’s nest in any tree or on the ground, with young ones or eggs and the mother sitting on the young or on the eggs, you shall not take the mother with the young. ⁷You shall let the mother go, but the young you may take for yourself, that it may go well with you, and that you may live long.
 - Deut. 25:4. You shall not muzzle an ox when it is treading out the grain.
 - Prov. 12:10. Whoever is righteous has regard for the life of his beast, but the mercy of the wicked is cruel.
 - Matt. 12:11–12. Which one of you who has a sheep, if it falls into a pit on the Sabbath, will not take hold of it and lift it out? ¹²Of how much more value is a man than a sheep! So it is lawful to do good on the Sabbath.
- iv. Only after the flood does it become clear that the preservation of God’s image on earth depends on mankind’s hunting and eating the beasts and birds, so as to generate fear within them toward mankind and to help minimize animal violence against humans (Gen. 9:2–3; cf. 6:13). This in turn provide one more means of sustaining the manifestation of the image of God on earth (Gen. 9:2–3).
- Gen. 6:13. And God said to Noah, “I have determined to make an end of all flesh for the earth is full of violence through them. Behold, I will destroy them with the earth.
 - Gen. 9:2–3. The fear of you and the dread of you shall be upon every beast of the earth and upon every bird of the heavens, upon everything that creeps on the ground and all the fish of the sea. Into your hand they are delivered. ³ Every moving thing that lives shall be food for you. And as I gave you the green plants, I give you everything.

5. ***Scripture usually portrays the suffering and death of living creatures, including animals, as part of curse, so millions of years of animal death and suffering pre-fall seems unlikely.*** God initially curses the world on account of human sin, so death and suffering in land animals and birds most likely resulted *from mankind's fall* and were not present before it, as all old earth models require.
- a. Introductory comments and qualifications:
 - i. Not only do we have fossils of thorns in geologic layers traditionally assigned pre-mankind (but see Gen. 3:18), in the same layers we also have fossils of animals with diseases like cancer and with signs of predatory activity—all pointers to mass animal suffering, which old-earth models place pre-fall. Evolutionists describe five mass extinction events *before* humanity arrives, but all this would suggest the judgment at the fall did nothing to non-human creation, apart from perhaps turning them against humanity. They were already experiencing suffering and death for thousands of years before human sinned. In contrast, Scripture appears to teach that all terrestrial life was cursed on account of humanity's sin and that Jesus came to remedy all consequences of the fall and to overcome all evil.
 - ii. No one questions the reality of cellular decay in vegetation pre-flood; indeed, plant life was given as food to humans, land animals, the birds, and creeping things (Gen. 1:29–30; cf. 9:3). What is at stake is the pre-fall suffering and death of terrestrial, air-breathing animals, which Genesis terms, along with mankind, “living creatures” (Gen. 1:20–21, 24, 30; 2:19–20; 6:19–20; 9:10, 12, 15–17; cf. 2:7).¹⁴
 - iii. The statement “you shall have [green plants] for food” in Gen 1:29 matched with the new comment in 9:3, “And as I gave you the green plants, I give you everything,” makes clear that humanity pre-flood was to be vegetarian. The additional statement 1:30 that the vegetation was also given for food to land creatures does not require that they could not also be meat eaters, for no command is given to match what God says to mankind. Nevertheless, God instruction to Noah that he “take with you every sort of food that is eaten, and store it up. It shall serve as food for you and for them [i.e., the terrestrial creatures]” (6:21) may suggest a vegetarian diet, unless there were *many more animals on the ark* than initially suggested in order to maintain the carnivorous diet of the meat eaters. What is clear at the very least is that Ps 104 speaks favorably of animals eating animals in the post-fall world (v. 21), whereas animal violence *against humans* is always condemned. This suggests that the “violence” of the animal kingdom that along with human sin instigates the flood judgment (Gen 6:13) is specifically a violence against humans. That is, God's problem is not animal predation per se, but animal predation against humans.

¹⁴ The Bible only speaks of plants “dying” in two places: Job 14:7–12 and John 12:24. The Job text stresses, however, how different the death of a tree is from the death of a human.

- iv. While at least humans were called to be vegetarian before the fall/flood (Gen 1:29), nothing is said about whether the consumption of fish was part of the pre-fall state or whether sea creatures could eat one another. God’s comments regarding the consumption of vegetables relate only to “everything that has the breath of life” (1:30), something that cannot be said of fish. In short, fish “death” pre-fall is not a question being addressed, and the fact that only terrestrial life died in the flood judgment suggests that God had no problem with the fish, even if they were already eating one another.
- b. The principal consequence of humanity’s Garden rebellion was human death both physically and spiritually. “*In the day that you eat of it you shall surely die*” (Gen. 2:17). Physically, the fall brought bodily decay and toilsome labor culminating in physical death (the “first death”). Spiritually, the fall brought separation from God’s life-giving presence resulting in the awakening of an innate disposition against God in all humans (i.e., total depravity) and a marked status as God’s enemy culminating in eternal destruction (the “second death”).
- Gen. 3:17–19, 22–23. And to Adam he said, “...Cursed is the ground because of you; in pain you shall eat of it all the days of your life; ¹⁸thorns and thistles it shall bring forth for you; and you shall eat the plants of the field. ¹⁹By the sweat of your face you shall eat bread, till you return to the ground, for out of it you were taken; for you are dust, and to dust you shall return.”...²²Then Yahweh God said, “Behold, the man has become like one of us in knowing good and evil. Now, lest he reach out his hand and take also of the tree of life and eat, and live forever—” ²³therefore Yahweh God sent him out from the garden of Eden to work the ground from which he was taken.
 - John 3:18, 36. Whoever believes in him is not condemned, but whoever does not believe is condemned already.... ³⁶Whoever believes in the Son has eternal life; whoever does not obey the Son shall not see life, but the wrath of God remain on him.
 - Rom. 5:12. Just as sin came into the world through one man, and death through sin, and so death spread to all men because all sinned—
 - 1 Cor. 15:21–22. For as by a man came death, by a man has come also the resurrection of the dead. ²²For as in Adam all die, so also in Christ shall all be made alive. (cf. Rom. 5:18–19)
 - 2 Cor. 4:16. Though our outer man is wasting away, our inner man is being renewed day by day.
 - Eph. 2:1–3. And you were dead in the trespasses and sins ²in which you once walked...³and were by nature children of wrath, like the rest of mankind.
 - Rev. 20:6, 14; 21:8. ^{20:6}Blessed and holy is the one who shares in the first resurrection! Over such the second death has no power, but they will be priests of God and of Christ, and they will reign with him for a thousand years.... ^{20:14}Then Death and Hades were thrown into the lake of fire. This is the second death, the lake of fire.... ^{21:8}But as for the cowardly, the faithless, the detestable, as for murderers, the sexually immoral, sorcerers, idolaters, and all liars, their portion will be in the lake that burns with fire and sulfur, which is the second death.”
- c. Humanity’s sin in the Garden brought negative consequences not only on humanity (Gen 3:16–19; Rom 5:12) but also to the created world at large:
- i. Examples:
- (1) *God cursed the animals.* Gen 3:14. “The LORD God said to the serpent, “Because you have done this, cursed are you above all livestock and above all beasts of the field; on your belly you shall go, and dust you shall eat all the days of your life.”

- (2) *God cursed the ground.* Gen 3:17–19. And to Adam he said, “Because you have listened to the voice of your wife and have eaten of the tree of which I commanded you, ‘You shall not eat of it,’ cursed is the ground because of you; in pain you shall eat of it all the days of your life; ¹⁸thorns and thistles it shall bring forth for you; and you shall eat the plants of the field. ¹⁹By the sweat of your face you shall eat bread, till you return to the ground, for out of it you were taken; for you are dust, and to dust you shall return.”
- (3) *God subjected the whole world to futility.* Rom 8:20–21. For the creation was subjected to futility, not willingly, but because of him who subjected it, in hope that the creation itself will be set free from its bondage to corruption and obtain the freedom of the glory of the children of God.
- ii. The nature of the curse on the non-human world is difficult to assess, but at the very least it included a “bondage to corruption” (Rom 8:21; cf. Gen 6:11–13). Should we expect the judgment to include morphological and behavioral transformations in the animal kingdom (e.g., shifts in lions from plant eaters to meat eaters)?
- Gen. 3:14. Yahweh God said to the serpent, “Because you have done this, cursed are you above all livestock and above all beasts of the field; on your belly you shall go, and dust you shall eat all the days of your life.”
 - Gen. 3:16–19. To the woman he said, “I will surely multiply your pain in childbearing; in pain you shall bring forth children. Your desire shall be for your husband, and he shall rule over you.” ¹⁷ And to Adam he said, “Because you have listened to the voice of your wife and have eaten of the tree of which I commanded you, ‘You shall not eat of it,’ cursed is the ground because of you; in pain you shall eat of it all the days of your life; ¹⁸thorns and thistles it shall bring forth for you; and you shall eat the plants of the field. ¹⁹By the sweat of your face you shall eat bread, till you return to the ground, for out of it you were taken; for you are dust, and to dust you shall return.”
 - Gen. 3:17–19. And to Adam he said, “Because you have listened to the voice of your wife and have eaten of the tree of which I commanded you, ‘You shall not eat of it,’ cursed is the ground because of you; in pain you shall eat of it all the days of your life; ¹⁸thorns and thistles it shall bring forth for you; and you shall eat the plants of the field. ¹⁹By the sweat of your face you shall eat bread, till you return to the ground, for out of it you were taken; for you are dust, and to dust you shall return.”
 - Gen. 4:10–12. And Yahweh said, “What have you done? The voice of your brother’s blood is crying to me from the ground. ¹¹And now you are cursed from the ground, which has opened its mouth to receive your brother’s blood from your hand. ¹²When you work the ground, it shall no longer yield to you its strength. You shall be a fugitive and a wanderer on the earth.”
 - Gen. 5:29. [Lamech] called his name Noah, saying, “Out of the ground that Yahweh has cursed this one shall bring us relief from our work and from the painful toil of our hands.”
 - Gen. 8:21–22. I will never again curse the ground because of man, for the intention of human’s heart is evil from his youth. Neither will I ever again strike down every living creature as I have done. ²²While the earth remains, seedtime and harvest, cold and heat, summer and winter, day and night, shall not cease.
 - Jer. 4:23–26. I looked on the earth, and behold, it was without form and void; and to the heavens, and they had no light. ²⁴I looked on the mountains, and

behold, they were quaking, and all the hills moved to and fro. ²⁵I looked, and behold, there was no man, and all the birds of the air had fled. ²⁶I looked, and behold, the fruitful land was a desert, and all its cities were laid in ruins before Yahweh, before his fierce anger.

- Is. 24:4–6. The earth mourns and withers; the world languishes and withers; the highest people of the earth languish. ⁵The earth lies defiled under its inhabitants; for they have transgressed the laws, violated the statutes, broken the everlasting covenant. ⁶Therefore a curse devours the earth, and its inhabitants suffer for their guilt; therefore the inhabitants of the earth are scorched, and few men are left.
 - Eccl. 1:15; 7:13. ^{1:15}What is crooked cannot be made straight, and what is lacking cannot be counted.... ^{7:13}Consider the work of God: who can make straight what he has made crooked.
 - Rom. 8:19–23. For the creation waits with eager longing for the revealing of the sons of God. ²⁰For the creation was subjected to futility, not willingly, but because of him who subjected it, in hope ²¹that the creation itself will be set free from its bondage to corruption and obtain the freedom of the glory of the children of God. ²²For we know that the whole creation has been groaning together in the pains of childbirth until now. ²³And not only the creation, but we ourselves, who have the firstfruits of the Spirit, groan inwardly as we wait eagerly for adoption as sons, the redemption of our bodies.
- d. Scripture regularly associated animal death with curse and animal life with blessing. Both realities may suggest that death and suffering in land animals and birds would have resulted *from the fall* and not been present before it.
- i. The fact that the Serpent is cursed “more than/above” (= Hebrew *min* of comparison) all livestock and beasts of the field implies that the land animals were indeed impacted directly and negatively by humanity’s fall (Gen 3:14; cf. 3:1).
 - Gen. 3:14. Yahweh God said to the serpent, “Because you have done this, cursed are you above all livestock and above all beasts of the field.”
 - ii. Animals are sacrificed as substitutes for human sin.
 - Gen. 3:21. And Yahweh God made for Adam and for his wife garments of skins and clothed them.
 - Gen. 4:4. And Abel also brought of the firstborn of his flock and of their fat portions. And Yahweh had regard for Abel and his offering.
 - Gen. 22:12–13. [The angel of Yahweh] said, “Do not lay your hand on the boy or do anything to him, for now I know that you fear God, seeing you have not withheld your son, your only son, from me.” ¹³ And Abraham lifted up his eyes and looked, and behold, behind him was a ram, caught in a thicket by his horns. And Abraham went and took the ram and offered it up as a burnt offering instead of his son.
 - iii. The curse on the ground (Gen. 3:17) shapes the backdrop to Noah’s birth (5:29), and the judgment curse of the flood includes the death of all beasts, birds, and creeping things (7:21–23), save those on the ark, which were set apart to preserve non-human land creatures after the flood (6:19–20; 7:3). For more on the flood judgment, see the “Reflection 1” at the end of this section.
 - iv. Eight of the ten judgment plagues on Egypt included animals becoming pests to humans or the mass suffering and death of livestock in a way that negatively impacted human existence.
 - (1) Frogs as pests (Exod. 8:1–15)
 - (2) Gnats as pests (8:16–19)

- (3) Flies as pests (8:20–32)
 - (4) Death of livestock (9:1–7)
 - (5) Boils on man and beast (9:8–12)
 - (6) Hail destroying man and beast (9:13–35)
 - (7) Locusts as pests (10:1–20)
 - (8) Death of firstborn of man and cattle (11:1–10; 12:29–32)
- v. The penal substitutionary blood of the Passover lamb alone secured the lives of Israel’s firstborn among *both* humans and beasts (Exod. 12:12–13).
 - vi. Under the blessings of the Mosaic (old) covenant, mankind lives in safety from animal predation (Lev. 26:6) and cattle and herds would flourish and increase (Deut. 7:13–14; 28:4, 11). In contrast, under curse, humans will stand in fear of animal predation (Lev. 26:22), cattle and herds would languish (Deut. 28:18), and dead human flesh would be the food of beast and bird (28:26). These realities are all affirmed in the prophets (e.g., Jer. 7:20; 12:4, Hag. 1:9–11, Mal. 3:9–12; 4:6).
 - vii. In the context of his wars of judgment, Yahweh called Israel to slaughter everything that breaths, including the animals (Deut. 13:15; 20:16; 1 Sam. 15:3).
 - viii. As in the flood judgment (see directly below), the judgment God declared against Nineveh through Jonah was against both man and beast, herd and flock, all of whom had turned from God through *violence* (Hebrew = חָרַף ; cf. Gen. 6:11). Following repentance, God’s pity extended not only to mankind but also to the animals.
 - Jon. 3:7–8. Let neither man nor beast, herd nor flock, taste anything. Let them not feed or drink water, ⁸but let man and beast be covered with sackcloth, and let them call out mightily to God. Let everyone turn from his evil way and from the *violence* that is in his hands.
 - Jon. 4:11. And should I not pity Nineveh, the great city, in which there are more than 120,000 persons who do not know their right hand from their left, and also much cattle?
 - ix. Reflection 1: The Genesis account asserts that the flood judgment was not only due to humanity’s corruption but even due to the corruption of the animal kingdom as seen in *violence* (Hebrew = חָרַף , 6:11, 13; cf. Jon 3:8; note: animals and birds are part of the “all flesh” that have angered God—see 6:19–20; 7:21). It is possible this text implies that any form of violent behavior in the animal kingdom is contrary to the original creation and therefore would not have been part of the pre-fall world but would have only resulted from the curse. More likely, however, because texts like Ps 104:21 celebrate God’s gift of prey to the young lion in the post-fall world, *the animal violence being condemned in Gen 6:11, 13 is specifically violence against humans* (probably the same in Jon 3:8). That is, even if predation and therefore animal suffering and death existed before the fall, what God condemns at the flood and what specifically would be considered cursed is animal violence against humans.

- Gen. 6:7, 11–13, 17, 19–20. So Yahweh said, “I will blot out man whom I have created from the face of the land, man and animals and creeping things and birds of the heavens, for I am sorry that I have made them.”... ¹¹Now the earth was corrupt in God’s sight, and *the earth was filled with violence*. ¹²And God saw the earth, and behold, it was corrupt, for *all flesh* had corrupted their way on the earth. ¹³And God said to Noah, “I have determined to make an end of *all flesh*, for the earth is filled with violence through them. Behold, I will destroy them with the earth.... ¹⁷For behold, I will bring a flood of waters upon the earth to destroy *all flesh* in which is the breath of life under heaven. Everything that is on the earth shall die.... ¹⁹And of every living thing of *all flesh*, you shall bring two of every sort into the ark to keep them alive with you. They shall be male and female. ²⁰Of the birds according to their kinds, and of the animals according to their kinds, of every creeping thing of the ground, according to its kind, two of every sort shall come in to you to keep them alive....
 - Gen 7:2–4, 13–16, 20–23. Take with you seven pairs of all clean animals, the male and his mate, and a pair of the animals that are not clean, the male and his mate, ³and seven pairs of the birds of the heavens also, male and female, to keep their offspring alive on the face of all the earth. ⁴For in seven days I will send rain on the earth forty days and forty nights, and every living thing that I have made I will blot out from the face of the ground.”... ¹³On the very same day Noah and his sons, Shem and Ham and Japheth, and Noah’s wife and the three wives of his sons with them entered the ark, ¹⁴they and every beast, according to its kind, and all the livestock according to their kinds, and every creeping thing that creeps on the earth, according to its kind, and every bird, according to its kind, every winged creature. ¹⁵They went into the ark with Noah, two and two of all flesh in which there was the breath of life. ¹⁶And those that entered, male and female of all flesh, went in as God had commanded him. And Yahweh shut him in.... ²⁰The waters prevailed above the mountains, covering them fifteen cubits deep. ²¹And all flesh died that moved on the earth, birds, livestock, beasts, all swarming creatures that swarm on the earth, and all mankind. ²²Everything on the dry land in whose nostrils was the breath of life died. ²³He blotted out every living thing that was on the face of the ground, man and animals and creeping things and birds of the heavens. They were blotted out from the earth. Only Noah was left, and those who were with him in the ark....
 - Gen. 8:1, 15–19. But God remembered Noah and all the beasts and all the livestock that were with him in the ark. And God made a wind blow over the earth, and the waters subsided.... ¹⁵Then God said to Noah, ¹⁶“Go out from the ark, you and your wife, and your sons and your sons’ wives with you. ¹⁷Bring out with you every living thing that is with you of all flesh—birds and animals and every creeping thing that creeps on the earth, and be fruitful and multiply on the earth.” ¹⁸So Noah went out, and his sons and his wife and his sons’ wives with him. ¹⁹Every beast, every creeping thing, and every bird, everything that moves on the earth, went out by families from the ark.
 - Gen. 8:21. I will never again curse the ground because of man, for the intention of man’s heart is evil from his youth. Neither will I ever again strike down every living creature as I have done.
- x. Reflection 2: No attempt is made to preserve the sea creatures, which suggests that (1) their potential eating of one another was *not* considered violence against God and that (2) the flood was not intended to kill all sea creatures.
- e. In Ecclesiastes, Qoheleth links animal death with human death (Eccl. 3:19–20) in a way that recalls God’s curse on the world (Gen 3:19) and associates it with the crooked realities that are frustratingly difficult to understand (= Hebrew, *hebel*; Greek *mataiotēs*), all by God’s design (Eccl. 1:14–15; 3:11;

7:13). Paul then appears to build on these truths and those in Gen. 6:11–13 in Rom. 8:20–21 when he speaks of God’s subjection of the world to “frustration” and “bondage to corruption.” Both these realities would suggest that animal death is indeed associated directly with the fall of mankind and was not part of the original creation pre-fall.

- Eccl. 3:19–21. For what happens to the children of man and what happens to the beasts is the same; as one dies, so dies the other. They all have the same breath, and man has not advantage over the beasts, for all is *enigmatic* (*hebel / mataiotēs*).²⁰ All go to one place. All are from the dust, and to dust all return.²¹ Who knows whether the spirit of man goes upward and the spirit of the beast goes down into the earth?
 - Gen. 3:17–19. And to Adam he said, “Because you have listened to the voice of your wife and have eaten of the tree of which I commanded you, ‘You shall not eat of it,’ cursed is the ground because of you; in pain you shall eat of it all the days of your life; ¹⁸ thorns and thistles it shall bring forth for you; and you shall eat the plants of the field. ¹⁹ By the sweat of your face you shall eat bread, till you return to the ground, for out of it you were taken; for you are dust, and to dust you shall return.”
 - Eccl. 1:14–15. I have seen everything that is done under the sun, and behold, all is vanity and a striving after wind. ¹⁵ What is crooked cannot be made straight, and what is lacking cannot be counted.
 - Eccl. 3:11. He has made everything beautiful in its time. Also, he has put eternity into man’s heart, yet so that he cannot find out what God has done from the beginning to the end.
 - Eccl. 7:13. Consider the work of God: who can make straight what he has made crooked?
 - Gen. 6:11–13. Now the earth *was corrupt* (*ephtharē*) in God’s sight, and the earth was filled with violence. ¹² And God saw the earth, and behold, *it was corrupt* (*ēn katephtharmenē*), for all flesh *had corrupted* (*katephtheiren*) way on the earth. ¹³ And God said to Noah, “I have determined to make an end of all flesh, for the earth is filled with violence through them. Behold, I *will destroy* (*kataphtheirō*) them with the earth.
 - Rom. 8:20–21. For the creation was subjected to *frustration* (*mataiotēs*), not willingly, but because of him who subjected it, in hope ²¹ that the creation itself will be set free from its bondage to *corruption* (*phthoras*) and obtain the freedom of the glory of the children of God.
- f. Old earth creationists struggle to clarify what actually changes in the non-human world at the curse, for they believe an extended period (even millions of years) of animal suffering and death already existed pre-fall. In contrast, Scripture points to God’s curse of the world as a decisive turning point and then commonly associates animal death with curse.
6. ***The limiting of animal death in the eternal state as a restoring of Eden suggests that all terrestrial death began after the fall. Specifically, because eating meat likely symbolizes Jesu’s victory over the curse, the limiting of animal death in the eternal state to redeemed humanity’s consuming of meat likely signals the restoring of Eden rather than an escalation beyond it and suggests that all terrestrial death began after the fall and that, therefore, the earth is young.***
- a. The view that animal death and suffering are not necessarily part of the curse raises a number of related questions:
- i. Is it proper to connect God’s subjecting the world to frustration and corruption in hope (Rom 8:20–21) with the fall (as most biblical interpreters believe and as the link with Gen 6:11–13 and *hebel* in Ecclesiastes suggests), or is it connected to the original creation?

- ii. Was part of the purpose of Jesus' death and resurrection to overcome the suffering and death of the animal kingdom or only a corruption of this suffering and death in the way it now brings post-fall harm to humans, the bearers of God's image? What is also clear is that Scripture views Christ's work as all-encompassing redemption that restores the original Garden of Eden while also escalating beyond it.
- b. Pastorally, suffering, death, decay, and natural disaster are natural *evils*, at least when associated with humans (e.g., a rabid dog creating fear in humans, a poisonous spider biting a child, a tornado taking out a town, an icy sidewalk resulting in an elderly person breaking a limb, a nuclear blast generating cancer in thousands). At the very least, we must view Christ's work as the central decisive agent for issuing in a new creation where in its consummate state all such evils will be eradicated. If thousands of years of natural cataclysmic "disasters" and of animal suffering, decay, and death are severed from the fruit of the curse, then one is forced to view such realities as natural *evils* only because they bring harm or discomfort to humans. There would be nothing inherently wrong or even chaotic about a tumor or arthritis or blindness or predation within the animal kingdom.
- c. Scripture only connects sin, suffering, and death to the fall.
- Gen. 3:14–15. *Because you have done this*, cursed are you above all livestock and above all beasts of the field; on your belly you shall go, and dust you shall eat all the days of your life. ¹⁵I will put enmity between you and the woman, and between your offspring and her offspring; *he shall bruise your head, and you shall bruise his heel*.
 - Rom 1:24, 26, 28. Therefore God gave them up in the lusts of their hearts to impurity....²⁶ For this reason God gave them up to dishonorable passions....²⁸ And since they did not see fit to acknowledge God, God gave them up to a debased mind to do what ought not to be done.
 - Rom. 8:18–23. The sufferings of this present time [not only for humans but also for all creation] are not worth comparing with the glory that is to be revealed to us. ¹⁹ For the creation waits with eager longing for the revelation of the sons of God. ²⁰ For the creation was subjected to futility, not willingly, but because of him who subjected it, in hope ²¹ that the creation itself will be set free from its bondage to corruption and obtain the freedom of the glory of the children of God. ²² For we know that the whole creation has been groaning together in the pains of childbirth until now. ²³ And not only the creation, but we ourselves, who have the firstfruits of the Spirit, groan inwardly as we wait eagerly for adoption as sons, the redemption of our bodies.
- d. The Bible also highlights Christ's death and resurrection as the only solution to the problem of human rebellion and its consequences, which appears to include all earthly evil, both natural evils like cancer and car accidents and moral evils directly related to rebellion against God. Specifically, Scripture teaches that Christ's work was designed to restore all things (Acts 3:21), to unite all things (Eph. 1:10), to reconcile all things to God (Col. 1:17), and to do away with death, tears, and pain (Isa. 25:8; Rev. 21:4), and to eradicate the curse and all that is unclean (Rev. 21:27; 22:3).
- Acts 3:19–21. Repent...²⁰that he may send the Christ appointed for you, Jesus, ²¹whom heaven must receive until the time for *restoring all the things* about which God spoke by the mouth of his holy prophets long ago.
 - Eph. 1:9–10. Making known to us the mystery of his will, according to his purpose, which he set forth in Christ ¹⁰as a plan for the fullness of time, *to unite all things in him*, things in heaven and things on earth.

- Col. 1:19–20. For in him all the fullness of God was pleased to dwell,²⁰ and through him *to reconcile to himself all things*, whether on earth or in heaven, making peace by the blood of his cross.
 - Is. 25:8. *He will swallow up death forever*; and the Lord Yahweh will wipe away tears from all faces, and the reproach of his people he will take away from all the earth, for Yahweh has spoken.
 - Rev. 21:4. He will wipe away every tear from their eyes, and *death shall be no more*, neither shall there be mourning, nor crying, nor pain anymore, for the former things have passed away.
 - Rev. 21:27. But *nothing unclean will ever enter it, nor anyone who does what is detestable or false*, but only those who are written in the Lamb’s book of life.
 - Rev. 22:3. *No longer will there be anything accursed*, but the throne of God and of the Lamb will be in it, and his servants will worship him.
- e. This eternal redemptive reality is portrayed both as a restoration of the Garden of Eden (pre-fall) and as escalating beyond it by completing what the first Adam failed to secure.
- i. This new/re-creation will bear elements that are similar to the original creation (Ezek 36:35; Isa 51:3; Rom 8:20–21; Rev 2:7; 22:1–5, 14, 19), but it will be absent of any past or potential influence of evil or curse (Rev 21:27; 22:1–5), save the sustained reminder of the former rebellion of the elect in order to sustain awe of the saving work of King Jesus. Examples of such reminders include lament over sin (Ezek. 36:31), the presence of salt in the bogs around the once-Dead Sea (47:11; cf. Gen 13:10; 19:24–26), the presence of transformed multiple tongues rather than a single language (Rev 5:9; 7:9; cf. Gen 11:6–9), and the visual identification of Christ as sacrificial and conquering Lamb (Rev. 5:5–6, 12–13; 7:10, 14; 17:14; 19:9; 21:22–23; 22:1, 3).
- Ezek. 36:35. And they will say, “This land that was desolate has become like *the garden of Eden*, and the waste and desolate and ruined cities are now fortified and inhabited.”
 - Isa. 51:3. For Yahweh comforts Zion; he comforts all her waste places and makes her wilderness like *Eden*, her desert like the garden of Yahweh.
 - Rom. 8:20–21. For the creation was subjected to *frustration (mataiotēs)*, not willingly, but because of him who subjected it, in hope²¹ that the creation itself will be set free from its bondage to *corruption (phthoras)* and obtain the freedom of the glory of the children of God.
 - Rev. 2:7. To the one who conquers I will grant to eat of the tree of life, which is in the paradise of God.
 - Rev. 22:1–5. Then the angel showed me the river of the water of life, bright as crystal, flowing from the throne of God and of the Lamb² through the middle of the street of the city; also, on either side of the river, the tree of life with its twelve kinds of fruit, yielding its fruit each month. The leaves of the tree were for the healing of the nations.³ No longer will there be anything accursed, but the throne of God and of the Lamb will be in it, and his servants will worship him.⁴ They will see his face, and his name will be on their foreheads.⁵ And night will be no more. They will need no light of lamp or sun, for the Lord God will be their light, and they will reign forever and ever.
- ii. In such a context of restoration, reconciliation, and eradication, it is important to recognize that predatory activity among the animal kingdom will cease and that the only death will result from humans

eating meat. In the present fallen age, the predatory nature of the animal kingdom is part of God’s revealed purposes (Ps. 104:21; Job 38:39–41),¹⁵ though in a way that does not threaten man (104:23; Deut. 7:22; Judg. 14:5; 2 Kgs. 17:25) or domesticated animals (1 Sam. 17:34–35; Isa. 31:4; Amos 3:12).

- Ps. 104:21–23. The young lions roar for their prey, seeking their food from God.²²When the sun rises, they steal away and lie down in their dens. ²³Man goes out to his work and to his labor until the evening.
 - Deut. 7:22. Yahweh your God will clear away these nations before you little by little. You may not make an end of them at once, lest the wild beasts grow too numerous for you.
 - Judg. 14:5–6. Then Samson went down with his father and mother to Timnah, and they came to the vineyards of Timnah. And behold, a young lion came toward him roaring. Then the Spirit of Yahweh rushed upon him, and although he had nothing in his hand, he tore the lion in pieces as one tears a young goat.
 - 2 Kgs. 17:25. And at the beginning of their dwelling there, they did not fear Yahweh. Therefore Yahweh sent lions among them, which killed some of them.
 - 1 Sam. 17:34–35. But David said to Saul, “Your servant used to keep sheep for his father. And when there came a lion, or a bear, and took a lamb from the flock, ³⁵I went after him and struck him and delivered it out of his mouth. And if he arose against me, I caught him by his beard and struck him and killed him.”
 - Isa. 31:4. For thus Yahweh said to me, “As a lion or a young lion growls over his prey, and when a band of shepherds is called out against him he is not terrified by their shouting or daunted at their noise, so Yahweh of hosts will come down to fight on Mount Zion and on its hill.”
 - Amos 3:12. Thus says Yahweh: “As the shepherd rescues from the mouth of the lion two legs, or a piece of an ear, so shall the people of Israel who dwell in Samaria be rescued, with the corner of a couch and part of a bed.”
- iii. It was only following mankind’s fall and the global curse that humans themselves became a target for animal predatory activity and that God granted people permission to consume animal meat, partly in order to cause the animals to fear them (Gen. 9:2–3; cf. 1:30). In this cursed world, eating meat affirms mankind’s call to reflect, resemble, and represent God by exerting dominion (1:26, 28; cf. Ps. 8:6–8[7–9]), and it also testifies to God’s curse-overcoming power.
- iv. While after the fall the Lord allowed mankind to eat animal flesh, from the earliest days after the exile from the garden, humans distinguished clean animals from unclean ones (Gen. 7:2–3, 8). Furthermore, God only allowed his people to eat the clean (Lev. 20:25–26). Scripture treats as unclean all animals that in some way symbolically look like

¹⁵ That Psalm 104:21 points to post-fall rather than pre-fall reality is suggested on a number of fronts: (1) While the psalmist addresses realities God made at the beginning (e.g., the moon in v. 19), such past, one-time events (highlighted through the Hebrew *qatal* form) are distinguished from what God continues to do daily (e.g., making darkness in v. 20, which is captured through a Hebrew *yiqtol* verb) and from what is happening right now or contemporaneous with what God is doing daily (e.g., the young lion *roaring* for prey in v. 21, which is expressed the a Hebrew *ptc.*). (2) That the psalm is focused principally on what is *presently experienced* in this post-fall world is seen in the fact that the psalmist prayed that “sinners be consumed from the earth” and “the wicked be no more” (104:35). (3) The statement in 104:23 that “Man (*’ādām*) goes out (= durative *yiqtol*) to his work and to his service (*’bōdâ*) until evening” appears to echo Gen. 3:23 and mankind’s post-fall life outside the garden: “Yahweh God sent him [the man, *’ādām*] out from the garden of Eden to serve (*’bd*) the ground (*’ādāmâ*) from which he was taken.”

the serpent in the garden—whether due to their crafty, predatory, killing instincts (Gen. 3:1–5 with 2:17; cf. John 8:44; 10:10) or due to their dust-eating association with death and waste (Gen. 3:14). And it is because Christ overcomes the evil one at the cross (Eph. 2:16; Col. 2:15; cf. Luke 10:18; John 12:31; Rev. 12:9) that all foods are now clean (Mark 7:19; Acts 10:10–15, 28; Rom. 14:14, 20; 1 Tim. 4:4). That makes the eating of all foods a testimony of Christ’s curse-overcoming power.

- v. In light of the full redemptive work of Christ, the restored new creation and new covenant will extend to the beasts, birds, and creeping things resulting in global safety (Hos. 2:18), as the once-predatory animals (perhaps a picture of hostile nations) become vegetarian and dwell peacefully alongside lamb and child, so that no creature need fear them (Isa. 11:6–9; 65:25).¹⁶ Are these images an *escalation* beyond the original state, or are they part of the return to the original state?
- Hos. 2:18. And I will make for them a covenant on that day with the beasts of the field, the birds of the heavens, and the creeping things of the ground. And I will abolish the bow, the sword, and war from the land, and I will make you lie down in safety.
 - Isa. 11:6–9. The wolf shall dwell with the lamb, and the leopard shall lie down with the young goat, and the calf and the lion and the fattened calf together; and a little child shall lead them. ⁷The cow and the bear shall graze; their young shall lie down together; and the lion shall eat straw like the ox. ⁸The nursing child shall play over the hole of the cobra, and the weaned child shall put his hand on the adder’s den. ⁹They shall not hurt or destroy in all my holy mountain; for the earth shall be full of the knowledge of Yahweh as the waters cover the sea.
 - Isa. 35:9. No lion shall be there, nor shall any ravenous beast come up on it; they shall not be found there, but the redeemed shall walk there.
 - Isa. 65:25. The wolf and the lamb shall graze together; the lion shall eat straw like the ox, and dust shall be the serpent’s food. They shall not hurt or destroy in all my holy mountain.
- vi. In this day of consummation, God will put down all enemy oppression, abolish all human disease, suffering, or death, and make an end of the curse (Isa. 25; 65:17–25; Rev. 21:3–5; 22:3).
- Isa. 25:7–8. And he will swallow up on this mountain the covering that is cast over all peoples, the veil that is spread over all nations. ⁸ He will swallow up death forever; and the Lord Yahweh will wipe away tears from all faces, and the reproach of his people he will take away from all the earth, for Yahweh has spoken.
 - Isa. 65:17, 19. For behold, I create new heavens and a new earth, and the former things shall not be remembered or come into mind. ¹⁸ But be glad and rejoice forever in that which I create; for behold, I create Jerusalem to be a joy, and her people to be a gladness. ¹⁹ I will rejoice in Jerusalem and be glad in my people; no more shall be heard in it the sound of weeping and the cry of distress.
 - Rev. 21:3–5. And I heard a loud voice from the throne saying, “Behold, the dwelling place of God is with man. He will dwell with them, and they will be his

¹⁶ It is possible that the imagery in Isaiah 11 and 65 is symbolic for peace among the nations; nevertheless, the imagery points forward to an age of peace and human flourishing where no fear of attack is present and where the animal kingdom is operating in accordance with its restored covenant with Yahweh (Hos 2:18).

people, and God himself will be with them as their God. ⁴ He will wipe away every tear from their eyes, and death shall be no more, neither shall there be mourning, nor crying, nor pain anymore, for the former things have passed away.” ⁵ And he who was seated on the throne said, “Behold, I am making all things new.” Also he said, “Write this down, for these words are trustworthy and true.”

- Rev. 22:3. No longer will there be anything accursed, but the throne of God and of the Lamb will be in it, and his servants will worship him.
- vii. Also in this day when God’s kingdom is finally realized on earth as it is in heaven, all creatures in heaven and on earth and under the earth will praise the redeeming Lamb (Rev. 5:13; cf. 5:6, 9, 12), following the pattern already set by the unceasing praise of the four living creatures, who themselves represent the four main “rulers” of the created sphere: the lion of the wild animals, the ox of the domesticated animals, mankind, and the eagle of the birds) (4:7–8).
- Rev. 5:13. And I heard every creature in heaven and on earth and under the earth and in the sea, and all that is in them, saying, “To him who sits on the throne and to the Lamb be blessing and honor and glory and might forever and ever!”
 - Rev. 4:6–8. And around the throne, on each side of the throne, are four living creatures, full of eyes in front and behind: ⁷ the first living creature like a lion, the second living creature like an ox, the third living creature with the face of a man, and the fourth living creature like an eagle in flight. ⁸ And the four living creatures, each of them with six wings, are full of eyes all around and within, and day and night they never cease to say, “Holy, holy, holy, is the Lord God Almighty, who was and is and is to come!”
- f. In the new heavens and new earth humans will never fear predators, and terrestrial creatures will not be the diet of one another. These realities are part of Christ’s fixing what went wrong at the fall and help identify the return to the pre-fall state rather than an escalation beyond it.
- g. Furthermore, apparently as a sustained testimony that Christ has fully overcome the curse, humans will continue to eat animals in the new heavens and new earth
- i. Examples of potential animal death in the eternal state:
- (1) Marine death:
 - (a) Ezekiel’s vision of the consummated kingdom includes the (once) Dead Sea swarming with fish and fisherman readying their nets for large catches (Ezek. 47:9–10).
 - Ezek. 47:9–10. And wherever the river goes, every living creature that swarms will live, and there will be very many fish. For this water goes there, that the waters of the sea may become fresh; so everything will live where the river goes. ¹⁰Fishermen will stand beside the sea. From Engedi to Eneglaim it will be a place for the spreading of nets. Its fish will be of very many kinds, like the fish of the Great Sea.
 - (b) In his resurrection body, Jesus consumed cooked fish, which suggests the possibility for this reality in the eternal state (Luke 24:41–43; cf. John 21:12–13).¹⁷

¹⁷ Though the fact that Jesus was yet glorified could suggest that we should not look at his pre-ascension post-resurrection experience as normative for life in the consummate state.

- Luke 24:41–43. And while they still disbelieved for joy and were marveling, he said to them, “Have you anything here to eat?”⁴² They gave him a piece of broiled fish,⁴³ and he took it and ate before them.
- (2) Mammal death:
- (a) Christ will not eat the Passover meal again with his disciples *until* it is fulfilled at the consummation of the kingdom (Luke 22:15–18, 29–30); the presence of the meal implies animal death, for the Passover meal included roasted lamb (Exod 12:3, 5–6, 8).
- Luke 22:15–18, 29–30. And he said to them, “I have earnestly desired to eat this Passover with you before I suffer.¹⁶ For I tell you I will not eat it until it is fulfilled in the kingdom of God.”¹⁷ And he took a cup, and when he had given thanks he said, “Take this, and divide it among yourselves.¹⁸ For I tell you that from now on I will not drink of the fruit of the vine until the kingdom of God comes.”²⁹ and I assign to you, as my Father assigned to me, a kingdom,³⁰ that you may eat and drink at my table in my kingdom and sit on thrones judging the twelve tribes of Israel.
- (b) The menu at the marriage supper of Lamb will include oxen and fattened livestock, which necessitates animal death (Matt 22:2–4; Rev 19:7, 9).
- Matt 22:2–4. The kingdom of heaven may be compared to a king who gave a wedding feast for his son,³ and sent his servants to call those who were invited to the wedding feast, but they would not come.⁴ Again he sent other servants, saying, ‘Tell those who are invited, “See, I have prepared my dinner, my oxen and my fat calves have been slaughtered, and everything is ready. Come to the wedding feast.”’
 - Rev 19:7, 9. Let us rejoice and exult and give him the glory, for the marriage of the Lamb has come, and his Bride has made herself ready. . . .⁹ And the angel said to me, “Write this: Blessed are those who are invited to the marriage supper of the Lamb.” And he said to me, “These are the true words of God.”
- (c) The menu at the feast of rich food on the new earth will be “full of marrow,” i.e., fatty parts in the bones of creatures (Isa 25:6, 8; Rev 21:1, 4, 10).
- Isa 25:6, 8. On this mountain Yahweh of hosts will make for all peoples a feast of rich food, a feast of well-aged wine, of rich food full of marrow, of aged wine well refined. . . .⁸ He will swallow up death forever; and the Lord Yahweh will wipe away tears from all faces, and the reproach of his people he will take away from all the earth, for Yahweh has spoken.
 - Rev 21:1, 4, 10. Then I saw a new heaven and a new earth, for the first heaven and the first earth had passed away, and the sea was no more. . . .⁴ He will wipe away every tear from their eyes, and death shall be no more, neither shall there be mourning, nor crying, nor pain anymore, for the former things have passed away.” . . .¹⁰ And he carried me away in the Spirit to a great, high mountain, and showed me the holy city Jerusalem coming down out of heaven from God.

- ii. A response:
- (1) God gave these texts to people living in a world of death. Most of these Scriptures portray the consummate new creation as a time of great fruitfulness and provision. The portrayal, therefore, may be figurative rather than literal. Furthermore, Jesus' consumption of fish after his resurrection does not require this to be part of the future kingdom. On the other hand, these texts do not balk at the thought that there will be certain types of animal death in the eternal state, though likely only in the sense of humans eating animals. Humans will never need to fear predators, and it does not appear that terrestrial creatures will be the diet of one another.
 - (2) With respect to marine death:
 - (a) The original creation account only allotted the vegetables to humans, beasts, and birds (Gen. 1:29–30; cf. 6:21; 9:3) and did not comment on whether sea creatures could be consumed or whether sea creatures could consume one another. However, the fact Gen. 9:2–3 includes fish with terrestrial creatures as fair-game for human consumption does caution viewing humans as being allowed to eat them pre-fall.
 - (b) Because sea creatures were not housed in the ark but were sustained through the flood, and because at the flood God's wrath due to the violence of creation was explicitly against "every living thing of all flesh" but included judgment only on humanity, *land animals, birds, and creeping things* (Gen. 6:7, 12–13, 19–20), this suggests that sea creatures were not considered "all flesh" and that they were not under God's wrath, even if larger fish were eating smaller post-fall. As such, "death" and "curse" are in some ways limited to the land sphere and do not impact the subterranean world, likely because humanity's existence and with that the perpetuation of the image of God on earth is linked directly to the land creatures and not to the water creatures.
 - (c) A portrayal of the eternal state, therefore, as being absent of the curse and yet as including the consumption of fish is not, by nature, at odds.
 - (3) With respect to mammal death:
 - (a) All the texts cited refer to humans consuming meat. In contrast, other texts highlight that animals will *not* consume one another or mankind.
 - Hos. 2:18. And I will make for them a covenant on that day with the beasts of the field, the birds of the heavens, and the creeping things of the ground. And I will abolish the bow, the sword, and war from the land, and I will make you lie down in safety.
 - Isa. 11:6–9. The wolf shall dwell with the lamb, and the leopard shall lie down with the young goat, and the calf and the lion and the fattened calf together; and a little child shall lead them. ⁷The cow and the bear shall graze; their young shall lie down together; and

the lion shall eat straw like the ox. ⁸The nursing child shall play over the hole of the cobra, and the weaned child shall put his hand on the adder's den. ⁹They shall not hurt or destroy in all my holy mountain; for the earth shall be full of the knowledge of Yahweh as the waters cover the sea.

- Isa. 35:9. No lion shall be there, nor shall any ravenous beast come up on it; they shall not be found there, but the redeemed shall walk there.
 - Isa. 65:25. The wolf and the lamb shall graze together; the lion shall eat straw like the ox, and dust shall be the serpent's food. They shall not hurt or destroy in all my holy mountain.
- (b) That an animal was the agent of humanity's destruction (Gen 3:1–15) suggests the possibility that the allowance of mankind to eat clean animals *after* the flood (Gen 9:3–4) was a typological anticipation of the day when all animals, clean and unclean, could be eaten once the unclean serpent and all animals associated with him were destroyed (cf. Mark 7:19; Acts 10:9–15).
- (c) The presence of humans eating meat in the consummated state is not strange, for it points to the triumph of the cross over all evil.
- (4) Because God only allowed humans to eat meat post-fall, and because eating that meat testifies to Christ's curse-overcoming victory, which culminates in Jesus's triumph over the unclean serpent at the cross, the restriction in the eternal state of animal death to redeemed humanity's meat-consumption points to the absence of animal death before the fall and, therefore, to a young earth.
7. **Conclusion:** The biblical data supports the belief that the earth is young. We see this (1) in the way Scripture portrays creation as a literal work week, (2) in the way the New Testament links the early history of mankind with the beginning, (3) in the unlikelihood that there are time gaps in the linear genealogies of Genesis, (4) in the way the Bible consistently portrays humanity as head of terrestrial creation, (5) in the fact Scripture always regularly associates animal death and suffering with curse, and (6) in the way Jesus's curse-overcoming work both restores and completes the pre-fall world.

C. A scientific assessment of a young earth model:

1. Most scientific methods for dating the universe are driven by uniformitarian assumptions regarding the starting conditions, constancy of rates, contamination, etc. As such, science alone cannot be used to determine the age of the earth. Furthermore, Scripture suggest the same due to two untestable factors: (1) the reality that creation was a special, miraculous activity by God that had no eye witnesses and (2) the fact that catastrophe (often due to the curse) is constantly reshaping and altering the universe. The latter element calls into question uniformitarian assumptions, for they by nature assume all has been constant.
2. Jesus' miracles like turning water into wine (John 2:7–10) and giving sight to the blind (9:6–11) all produced the appearance of age, even though, in fact, moments

before the state of the matter was completely different. The testimony of the master of the feast regarding the wine shows how miracles cannot always be dated accurately (2:10): “Everyone serves the good (and by nature, oldest) wine first, and when people have drunk freely, the poor wine. But you have kept the good wine until now.”

3. Responses to common scientific claims:
 - a. *Expansion rate of the universe*: With their belief that the universe is expanding, old earth proponents assume 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).
 - Additional note 1: Physicist John Hartnett thinks the idea that the universe is expanding is far from proven: John Hartnett, “Does Observational Evidence Indicate the Universe Is Expanding? — Part 2: The Case against Expansion,” *Journal of Creation* 25, no. 3 (December 2011): 115–20.
 - Additional note 2: On the universe’s cooling and expansion rates and for a more rapid expansion model, see the following studies: Emily Conover, “New Data Fuel Debate on Universe’s Expansion Rate,” *ScienceNews*, February 2, 2017, <https://www.sciencenews.org/article/new-data-fuel-debate-universes-expansion-rate>; Emily Conover, “Scientists Still Can’t Agree on the Universe’s Expansion Rate,” *ScienceNews*, July 16, 2019, <https://www.sciencenews.org/article/universe-expansion-rate-mystery>.
 - b. *Starlight from events in the distant past*: 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). Old earth advocates assume that light’s speed is constant in all directions (isotropic), but such is not required (anisotropic), and light’s one-way speed could be virtually instantaneous, which is what Genesis 1:14–15 suggests.
 - Additional note: Einstein’s relativity physics highlights that light’s one-way speed is relative, so long as the roundtrip speed remains constant. Albert Einstein, *Relativity: The Special and General Theory*, trans. R.W. Lawson (New York: Crown, 1961), 22–23. For the basic implications of this fact for a young universe, see Jason Lisle, “Distant Starlight—The Anisotropic Synchrony Convention,” *Answers Magazine*, January 1, 2010, <https://answersingenesis.org/astronomy/starlight/distant-starlight-thesis/>. For a more detailed discussion with answers to objections, see Lisle, “Anisotropic Synchrony Convention—A Solution to the Distant Starlight Problem,” *Answers Research Journal* 3 (2010): 191–207.
 - c. *Ice layers*: 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.

- Additional note 1: Both old-earth and young-earth scientists generally agree about the annual compression thickness in the highest layers of the polar ice sheets; it is when one gets deeper that one's pre-judgment on the earth's age influences assessment. All the volcanic eruptions Grudem cites come from the higher layers related to recent history and are not linked to the lower core commonly associated with the ice age(s).
- Additional note 2: Geologists can identify "cycles" of oxygen isotopes, because water evaporation leaves behind heavier oxygen atoms (^{18}O), whereas snowfall has a greater concentration of lighter oxygen atoms (^{16}O). After the initial layers at the top of ice cores, melting and pressure have caused the lower ice cores to get blurry, necessitating a different way for dating. Tracking oxygen isotopes is a common solution, but storms and other phenomena like a moving snow dune can easily skew one's interpretation, especially if the estimated annual thickness is misguided. Note the following quote from a number of old-earth geologists: "In counting any annual marker, we must ask whether it is absolutely unequivocal, or whether nonannual events could mimic or obscure a year. For the visible strata (and, we believe, for any other annual indicator at accumulation rates representative of central Greenland), it is almost certain that variability exists at the subseasonal or storm level, at the annual level, and for various longer periodicities (2-year, sunspot, etc.). We certainly must entertain the possibility of misidentifying the deposit of a large storm or a snow dune as an entire year or missing a weak indication of a summer and thus picking a 2-year interval as 1 year." See R.B. Alley et al., "Visual-Stratigraphic Dating of the GISP2 Ice Core: Basis, Reproducibility, and Application," *Journal of Geophysical Research* 102, no. C12 (November 1997): 26,378.
- Additional note 3: On the possibility that weekly storms formed the ice masses rapidly in a single ice age following the flood, see especially Larry Vardiman, **Ice Cores and the Age of the Earth** (El Cajon, CA: Institute for Creation Research, 1993).
- Additional note 4: For more on misguided old-earth assumptions related to the polar ice sheets, see Michael Oard, **Frozen in Time: The Woolly Mammoth, the Ice Age, and the Bible** (Green Forest, AR: Master Books, 2004), 119–26, <https://answersingenesis.org/environmental-science/ice-age/do-ice-cores-show-many-tens-of-thousands-of-years/>; cf. Andrew A. Snelling, "Layers of Assumption: Are Tree Rings and Other 'Annual' Dating Methods Reliable?" **Answers Magazine**, January 1, 2017, <https://answersingenesis.org/age-of-the-earth/layers-assumption/>. The old-earth interpretation of the data assumes that the middle and lower ice-age portions of the polar ice sheets grew up over

- three or more ice-age cycles, each approximately 100,000 years long. Milankovitch first posited this “astronomical theory of the ice ages”; see M. Milankovitch, “Expansion and Current Status of the Astronomical Theory of Geological Climates,” **Experientia** 4, no. 11 (1948): 413–18. For an overview and response, see Oard, **Frozen in Time**, 65–68.
- d. *Sediment layers at the bottom of lakes*: 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.
- Additional note 1: Representing one year’s deposit in a lake bottom, a **varve** is a pair of contrasting sedimentary layers or laminae — the thick, coarse “summer” layer caused by spring run-off and made of large, light-colored grains of sand or silt, and the thin, fine-grained “winter” layer caused by settling debris and made of dark, clay-like particles from plants. As disclosed in recent major disasters — like Hurricane Donna (1960), the flood in Bijou Creek, CO (1965), and the volcanic eruption of Mount St. Helens (1980), huge amounts of water, landslides, flows of mud or volcanic ash, steam water, and other catastrophic phenomena can deposit many altering laminae in short amounts of time (be it weeks, days, or even hours). Hence, the altering of coarse and fine laminae could result from event-layering and does not necessarily signal annual sediment deposition. Furthermore, the biblical flood would have caused massive amounts of such sedimentation, which cautions all attempts to date the remote past by means of sedimentary layers. See especially Jake Hebert, Andrew A. Snelling, and Timothy L. Clarey, “Do Varves, Tree-Rings, and Radiocarbon Measurements Prove an Old Earth? Refuting a Popular Argument by Old-Earth Geologists Gregg Davidson and Ken Wolgemuth,” **Answers Research Journal** 9 (2016): 339–61; Snelling, “Layers of Assumption.”
 - Additional note 2: As Hebert, Snelling, and Clarey note, varve dating is dependent on radiocarbon dating, which is calibrated against tree-ring counts, whose tree-ring chronologies were developed through radiocarbon dating. Thus, “none of these dating methods are truly independent and thus objective. They are inter-calibrated and adjusted to agree because of the assumption they are supposed to agree, due to the assumed uniformity of geologic and physical processes that willfully ignores the evidence for the global Flood cataclysm and its aftermath” (Hebert, Snelling, and Clarey, “Do Varves, Tree-Rings, and Radiocarbon Measurements Prove an Old Earth?” 357). For an overview of radiocarbon dating, its challenges, and a young-earth response, see this three-part study: Andrew A. Snelling, “Carbon-14 Dating: Understanding the Basics,” **Answers Magazine**, October 1 2010, <https://answersingenesis.org/geology/carbon-14/carbon-14->

- dating/; Andrew A. Snelling, “Carbon-14 in Fossils and Diamonds: An Evolutionary Dilemma,” **Answers Magazine**, January 1, 2011, <https://answersingenesis.org/geology/carbon-14/carbon-14-in-fossils-and-diamonds/>; Andrew A. Snelling, “A Creationists Puzzle: 50,000-Year-Old-Fossils,” **Answers Magazine**, April 1, 2011, <https://answersingenesis.org/geology/carbon-14/a-creationist-puzzle/>.
- e. Radiometric dating of rocks: 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.
- i. Additional note 1: On “contamination” and “leaching”:
“Contamination” occurs when an outside constituent or impurity seeps in and alters a natural material; “leaching” occurs when a soluble chemical or mineral drains away due to percolating liquid, especially rainwater.
 - ii. Additional note 2: On “decay rate”: The “decay rate” is how long one element (a parent isotope) takes to change into another (a daughter isotope).
 - iii. Additional note 3: For a helpful overview of radiometric dating that details its challenges due to uniformitarian assumptions, see Andrew A. Snelling, “Radiometric Dating: Back to Basics,” **Answers Magazine**, June 17, 2009, <https://answersingenesis.org/geology/radiometric-dating/radiometric-dating-back-to-basics/>; Andrew A. Snelling, “Radiometric Dating: Problems with the Assumptions,” **Answers Magazine**, October 1, 2009, <https://answersingenesis.org/geology/radiometric-dating/radiometric-dating-problems-with-the-assumptions/>; Andrew A. Snelling, “Radiometric Dating: Making Sense of the Patterns,” **Answers Magazine**, January 1, 2010, <https://answersingenesis.org/geology/radiometric-dating/radiometric-dating-making-sense-of-the-patterns/>. Snelling supplies a number of examples where all three assumptions have been called into question based on modern natural disasters.
- f. Continental separation: 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).

- Additional note 1: On plate tectonics after the flood: Once the heavier pre-flood crust was subducted into the mantle (one plate plunging beneath another) and replaced by the lighter, more fluid mantle rock, the continental displacement would have decelerated drastically. See especially John R. Baumgardner, “Catastrophic Plate Tectonics: The Geophysical Context of the Genesis Flood,” **Journal of Creation** 16, no. 1 (April 2002): 58–63, <https://answersingenesis.org/geology/plate-tectonics/catastrophic-plate-tectonics-geophysical-context-of-genesis-flood/>; Andrew A. Snelling, “Hawaii’s Volcanic Origins — Instant Paradise,” **Answers Magazine**, January 1, 2014, <https://answersingenesis.org/geology/plate-tectonics/hawaiis-volcanic-origins-instant-paradise/>.
 - Additional note 2: On catastrophic plate tectonics, see Andrew A. Snelling, “Can Catastrophic Plate Tectonics Explain Flood Geology?” in **The New Answers Book 1: Over 25 Questions on Creation/Evolution and the Bible**, ed. Ken Ham and Bodie Hodge (Green Forest, AR: Master, 2006), 186–97, <https://answersingenesis.org/geology/plate-tectonics/can-catastrophic-plate-tectonics-explain-flood-geology/>. For a detailed scientific overview of the catastrophic plate-tectonics model, see Steven A. Austin et al., “Catastrophic Plate Tectonics: A Global Flood Model of Earth History,” **Answers in Depth** 5 (2010): 1–13, <https://answersingenesis.org/geology/plate-tectonics/catastrophic-plate-tectonics-global-flood-model-of-earth-history/>.
4. Conclusion: Science is a servant to Scripture and any correct interpretation of scientific data must align with the biblical data, which assumes both miraculous creation and global cataclysm. Heat and pressure that accompanies cataclysm alters states, and because no human was present to observe the changes in states, it is unjustified to build a model of dating the universe upon uniformitarian assumptions.