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The Region of Eden: Analysis and Debate

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Abstract

Eastern Anatolia, southern Iraq, and Jerusalem have been proposed as the regions that once contained the Garden of Eden. Several creationists have argued that it is impossible to locate the region of Eden due to the dramatic changes to the surface of the earth during the Noachian Deluge. However, a close analysis of relevant Biblical passages and the archaeology, geography, geology, paleontology, and paleobotany of Anatolia, the Near East, and North Africa suggest that the region of Eden was located in Southeastern Anatolia. This region provides source waters for four rivers, following Precambrian rift valleys or faults, which are connected to the Biblical locales of Asshur, Havilah, and Cush. The rivers traversed a landmass that originated in the Precambrian not covered by the alleged expanse of the Tethys Ocean. Furthermore, southeastern Anatolia is associated with the ancient kingdom of the House of Eden. Although the Bible states that the Flood was a global catastrophic event, the confluence of biblical texts with geographical, geological, and other data provides a compelling indication that its effects did not eradicate all evidence of Eden's original location.

Introduction

The search for the region that comprised the Garden of Eden is one of the few areas where there is partial agreement between evolutionists and some young-earth creationists. Although their viewpoints are radically different, both concur that the search for Eden is an exercise in futility. For the evolutionists, God, creation, and Eden never existed, so attempts to find the Garden are without merit. Similarly, some creationists have adopted the belief that the search for Eden is nonsensical. For them, the region of Eden can no longer be located because the Noachian Deluge erased any geographical continuity between the pre-Flood and post-Flood earth.

If the region of Eden could be ascertained, this would have broad implications for future research such as comparisons of site formation processes, geological strata, and the distribution of fauna and flora, inside and outside this region.

Biblical Description

In Genesis 2:8–14, the description of the location of the Garden of Eden is rich in detail:

> *2:8: And Jehovah God planted a garden in Eden [5731], to the east; and He put the man whom He had formed there.*
>
> *2:9: And out of the ground Jehovah God made to spring up every tree that is pleasant to the sight, and good for food. The Tree of Life was also in the middle of the garden; also the Tree of Knowledge of Good and Evil.*
>
> *2:10: And a river went out from Eden to water the garden, and from there it was divided and became four heads.*
>
> *2:11: The name of the first is the Pishon [6376]. It is the one surround-*

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ing all of the land of Havilah [2341] where there is the gold.

2:12: And the gold of that land is good and there is bdellium, resin gum, and the stone of onyx.

2:13: And the name of the second river is the Gihon [1521]. It is the one surrounding all the land of Cush [3578].

2:14: And the name of the third river is the Hiddekel [2313]. It is the one going east of Asshur [804]. And the fourth river is the Perat [6578]. (The Interlinear Bible with Strong's Concordance Numbers)

The Hebrew text is clear that the Garden of Eden was the source of four rivers: *Pishon*, *Gihon*, *Hiddekel*, and the *Perat*. A river "went out from Eden" and "from there it was divided and became four heads." The Hebrew use of the word "from" [מ] and the fact that the river from Eden became the "head" of the four rivers leaves little doubt that Eden was the origin and not the destination of these four rivers.

Perat and *Hiddekel*

Of the four rivers associated with the Garden of Eden, the *Perat* [פרת] is most frequently mentioned river in the Bible and refers to the Euphrates River in modern Iraq and Turkey. After Genesis 2:14, the Perat is noted in 18 other verses from Genesis through Jeremiah (Gen. 15:18; Deut. 1:7, 11:24; Josh. 1:4; 2 Sam. 8:3; 2 Kings 23:29; 24:7; 1 Chron. 5:9; 18:3; 2 Chron. 35:20; Jer. 13:4, 5, 6, 7; 46:2, 6,10; and 51:63). In Akkadian, the river was the *Pu-rat-tu*, and in Sumerian, the *Buranun*.

The Hiddekel [חדקל] is mentioned in one other verse outside of Genesis 2:14, namely in Daniel 10:4, where the Prophet receives a vision as he "was by the side of the great river, which is the Hiddekel." The author of Genesis 2:14 describes the Hiddekel as "the one going east of Asshur." Sumerians referred to the river as the Idigna or Idigina. For the Akkadians, the river was the Idiqlat. Nearly all conservative Biblical scholars equate the Hiddekel with the Tigris River. The Tigris River is located to the east of the archaeological site of Asshur, or Assur, the ancient capital of the Assyrian Empire (Healy, 1991; Parpola, 2004; Schomp, 2005).

The origin of the modern Tigris and Euphrates Rivers is in Eastern Anatolia, near the city of Elazig, in modern Turkey. Biblical scholars equate the *Perat* and *Hiddekel* with the Euphrates and Tigris Rivers. Most creationists believe that after the Genesis Flood, the *Perat* and *Hiddekel* represent the Euphrates and Tigris Rivers. However, the equation of the Euphrates and Tigris Rivers with the *Perat* and *Hiddekel* before the Genesis Flood is debated and discussed below.

Pishon

The *Pishon* [פישון] is not mentioned outside the original reference in the second chapter of Genesis. The *Pishon* is described as "surrounding" all the land of Havilah and is associated with gold, bdellium, resin gum, and onyx (Gen. 2:11–12). Although, the *Pishon* is not mentioned again, the land of Havilah is mentioned in several texts after Genesis 2. The location of Havilah is, I believe, instrumental in locating this ancient river, which originated from Eden.

In Biblical texts, Havilah is both a name and geographical location. In Genesis 10:7 and 29, which are replicated in 1 Chronicles 1:9 and 23, Havilah was the name of two men. Both were descendants of Noah. The first was a son of Cush, who was a son of Ham (Gen. 10:6–7). The second was the son of Joktan. Joktan was a descendent of Noah, through Shem, Arphaxad, Shelah, and Eber, who was the father of Joktan (Gen. 10:21–29).

Two passages, Genesis 25:18 and 1 Samuel 15:7, point to the geographical location of Havilah. Genesis 25:18 notes that the sons of Ishmael lived in an area that extended from Havilah to Shur. Shur is described in Genesis 25:18 as "facing Egypt as you come toward Asshur [Assyria]" (על-פני מצרים באכה אשורה אשור). The origin of the road leading from Egypt to Assyria was located in the northwest region of the Sinai Peninsula. Hence, the region of Shur represented the northwestern area of the Sinai Peninsula.

The second reference to Havilah is found in 1 Samuel 15:7. Here, King Saul moved south from Israel and Judah and struck down the people of Amalek from Havilah to Shur. Shur is described as "before" or "on the face" of Egypt (אשר על-פני מצרים). For Saul to move south, through Havilah, and then to Shur, would indicate that Havilah was in the northeastern region of the Sinai Peninsula.

Also instructive is that King Saul sent a warning to the Kenites to "Go! Depart! Go out from the midst of Amalek, lest I destroy you with them" (1 Sam. 15:6). That the Kenites lived in the northeast region of the Sinai Peninsula is supported by other Biblical texts. Numbers 23:28 states that Balak, the king of Moab, took Balaam to the top of Mount Peor in Moab and oriented him "toward the wasteland." From here, Balaam could see the land of the Kenites (Num. 24:21). All locales—Moab, Mount Peor, the "wasteland" of the Dead Sea, and the Kenites—are in or near the northeastern region of the Sinai Peninsula (Figure 1). Therefore, the location of Havilah can be deduced.

a. Shur is directly east of Egypt in the northwestern region of the Sinai (Gen. 25:18; 1 Sam. 15:7).
b. Havilah is near Shur (Gen. 25:18).
c. The Kenites lived near Moab (Num. 24:21).
d. Moab, Mount Peor, the wasteland, and the Kenites were in or near the northeastern region

Figure 1. Northeastern Sinai Peninsula showing the location of the Wadi HaArava and its associated seasonal rivers.

of the Sinai Peninsula (Num. 24:21).

e. King Saul warned the Kenites, who were living near the Amalekites, near the land of Havilah (1 Sam. 15:6).

f. King Saul attacked south from Israel and Judah and then east toward Shur, going through the region of Havilah (1 Sam. 15:7).

Hence, the only locale that Havilah could represent, according to all Biblical sources, is the northeastern region of the Sinai Peninsula. And the determination of Havilah's location is crucial to identifying the *Pishon*.

Today, the Wadi HaArava, a seasonal river, runs through the northeastern area of the Sinai Peninsula. From the Wadi HaArava seasonal rivers emerge, including the Nahal Paran, Nahal Hiyyon, Wadi Musa, Wadi Girafi, and the Wadi Rum. These seasonal rivers extend throughout the northeastern Sinai and are similar to the description in Genesis 2:11, where the *Pishon* surrounded the land of Havilah (Figure 1).

Egyptian sources state that the northeastern Sinai was a mining area for gold and other precious stones. Large state-controlled expeditions mined gold, copper ores, and decorative stones in this region, using prisoners, slaves, and occasionally Egyptian peasants (Greaves and Little, 1929). In addition, King Gudea (2144–2124 B.C.) recorded that he imported gold, precious stones, and copper from the Sinai for the temples at Lagash (Lucas, 1962).

With regard to geology, the Wadi HaArava follows an ancient rift valley that extends through Paleozoic strata. This rift valley originates in eastern Anatolia: from the Orontes River, to the Lintani River, the Kinneret (Sea of Galilee), Jordan River, Dead Sea, Wadi Ha Arava, Gulf of Aqaba, and to the Red Sea. The Orontes, Lintani, and Jordan rivers were interrupted by tectonic and volcanic activity in the Late Cenozoic.

The origin of the Orontes River is adjacent to the source areas for the Tigris and Euphrates, near the modern city of Elazig in Turkey (Figure 2).

In light of Biblical texts, archaeological sources, and geological evidence, I suggest the *Pishon* was an ancient waterway correlating with a rift valley that originated in eastern Anatolia and generally followed the modern Orontes / Litani / and Jordan waterways. The *Pishon* originated in the same area as the Tigris and Euphrates, flowed south away from Eden, and moved through the land of Havilah.

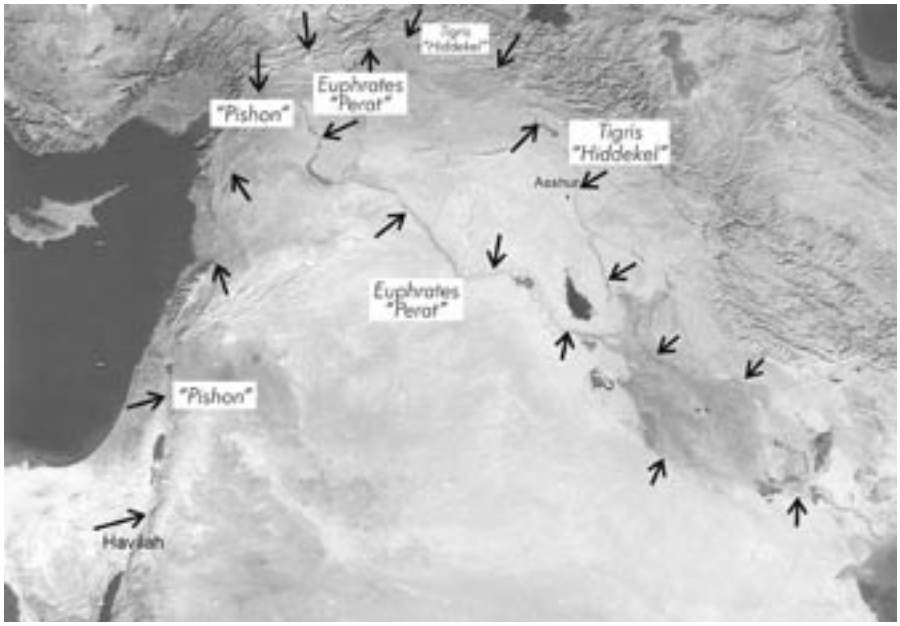

Figure 2. Satellite photograph of the Middle East showing the Tigris and Euphrates Rivers and the rift valley and waterways that once comprised the *Pishon:* the Orontes, Litani, Jordan, and Wadi HaArava.

Gihon

The *Gihon* [גיחון] is mentioned only in Genesis 2:13 and is described as surrounding the land of Cush. Most conservative Biblical scholars identify Cush as modern Ethiopia. The only extant river associated with Cush is the Nile River and its tributaries. Hence, creationists are confronted with a difficult problem: how to connect the origin of the Tigris, Euphrates, and *Pishon*, with the land of Cush.

The concept of a river connecting eastern Anatolia to Africa is alien to many evolutionary geologists. For the latter, the area of North Africa, the Middle East, and much of Anatolia was under water, beneath the Tethys Ocean, during most of the geological history of the Earth. Benton provides many excellent illustrations of the alleged waters of the Tethys, replete with warm and cold ocean currents, covering the landmasses during the Cretaceous period (Benton, 1996). However, he enigmatically illustrates terrestrial sauropod remains in these alleged marine areas (Figure 3).

Paleontologists and paleobotanists have limited the expanse of the Tethys Ocean by identifying terrestrial faunal and floral remains in areas in the midst of this supposed sea. Woodmorappe (1983), citing a deluge of articles by evolutionists, has plotted these re-

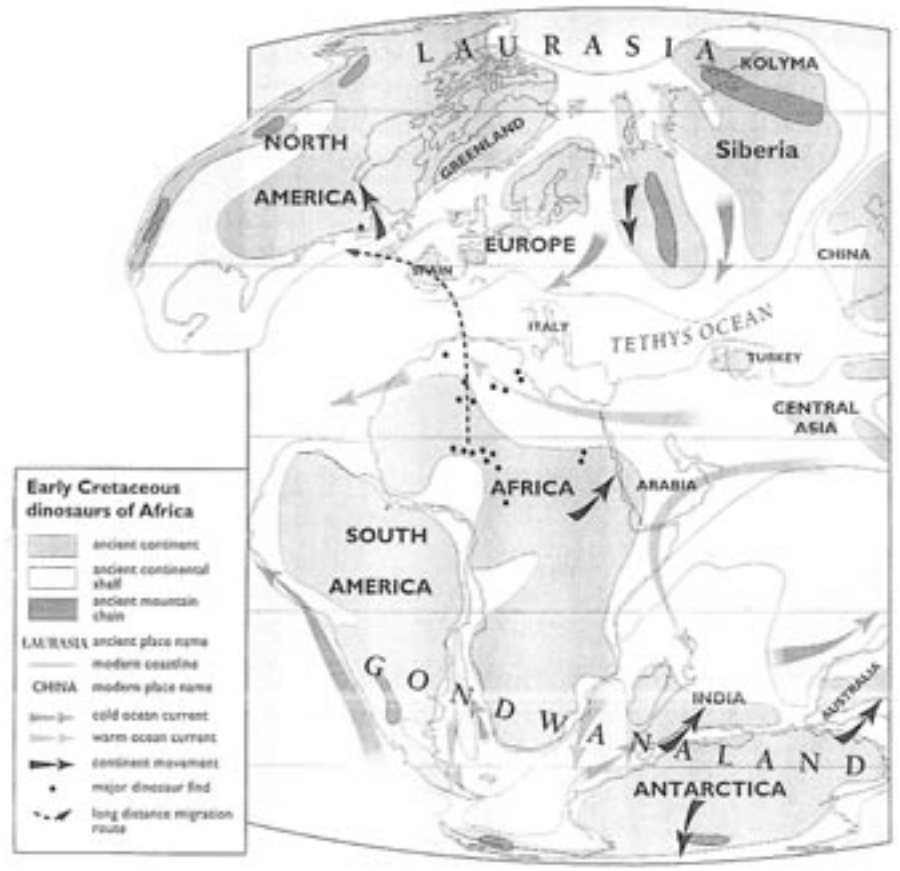

Figure 3. A familiar evolutionary geology view of the areas of North Africa, Middle East, and Anatolia, under the alleged waters of the Tethys Ocean during the Cretaceous (Benton, 1996).

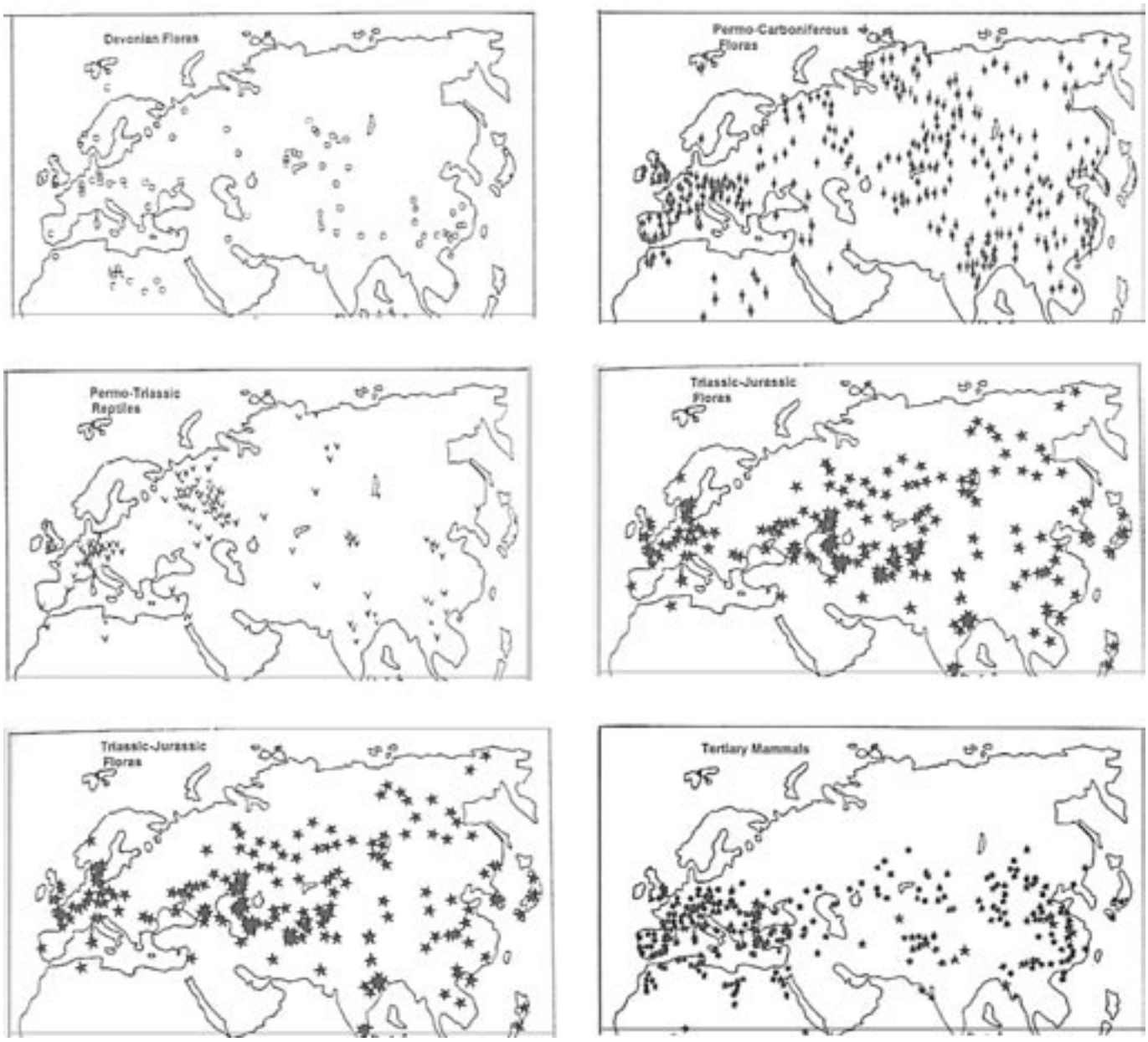

Figure 4. The location of terrestrial faunal and floral remains found in deposits, from the Devonian to the Tertiary, in the midst of the alleged Tethys Ocean (from Woodmorappe, 1983).

mains in Devonian, Carboniferous, Permian, Triassic, Jurassic, Cretaceous, and Tertiary deposits in Anatolia, the Middle East, and North Africa (Anderson and Cruickshank, 1978; Bellini and Massa 1980; Beltan et al., 1979; Charig, 1971; 1973; Cooke, 1972; 1978; Cox, 1973; Davies, 1975; El-Khayal et al., 1980; Glut, 1972; Goldsmith et al., 1982; Hallam, 1973; Klitzsch, 1981; Lejal, 1975; Savage, 1967; Savage and Russell, 1983; Wesley, 1973).

Since Woodmorappe's article, paleontologists have unearthed more evidence for terrestrial plants and animals in Anatolia and the Middle East. Fragments and cryptospores of terrestrial plants were identified from mid-Ordovician deposits in Saudi Arabia and Oman, the latter being similar to liverwort (Strother et al., 1996; Wellman et al., 2003). Paleontologists have discovered fungi from terrestrial ecosystems in Permian and Triassic deposits in the Negev, Israel; south Anatolia, Turkey; Saudi Arabia; the southern Alps in Italy; and in Dinarides, Bosnia (Visscher et al.,

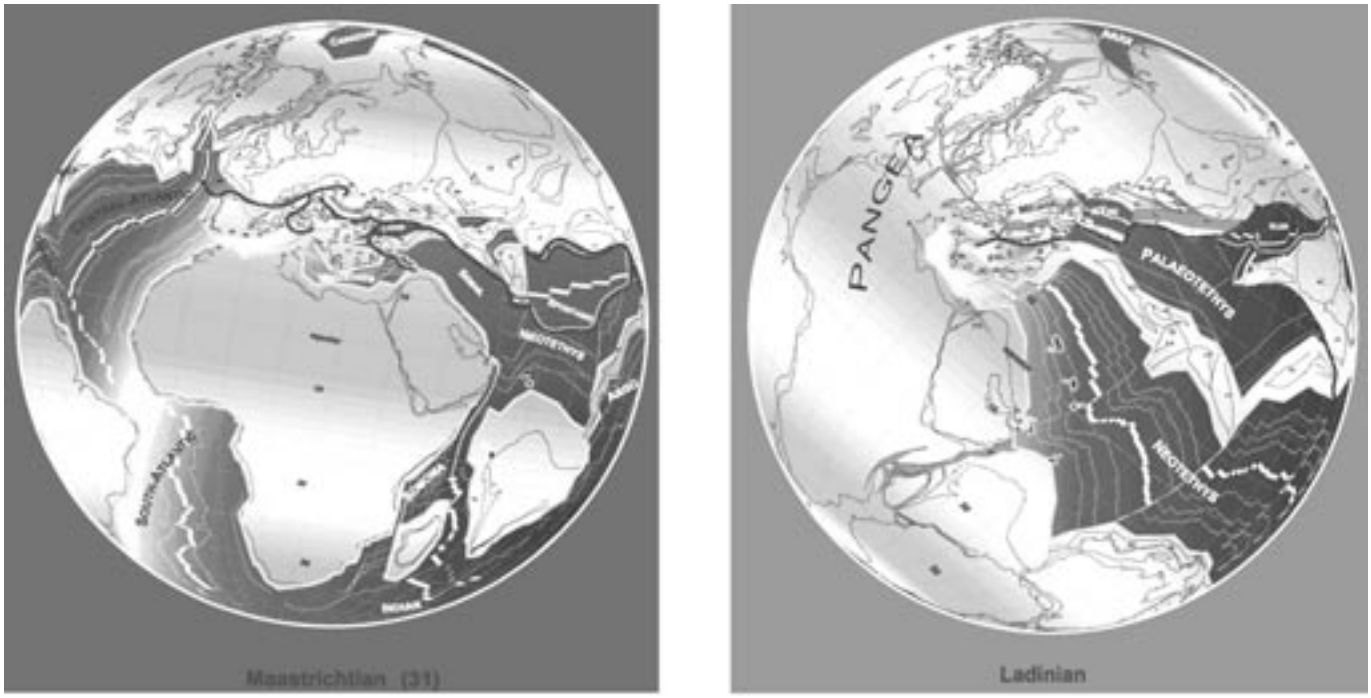

Figure 5. Recent views from evolutionary geologists showing a more restricted Tethys Ocean with Eastern Anatolia, the Middle East, and Africa above the waters. Shown here are two maps exhibiting the extent of the Tethys Ocean and terrestrial land from the Maastrichtian to the Ladinian, allegedly from 69 to 230 MYA (from Stampfli and Borel, 2002).

1996). Palaeobotanists identified fossilized wood in Jurassic and Early Cretaceous strata in Lebanon and Turkey and several tropical species of *Dicroidium*, extinct plants with mostly fernlike foliage but with real seeds, in the Permian Um Irna Formation near the Dead Sea in Jordan (Kerp et al., 2004; Philippe et al., 2006). In Cretaceous (Turonian) deposits in the Negev Desert, researchers identified the remains of insect leaf parasites, deciduous broadleafs, and angiosperms (Dobruskina and Krassilov, 1995; Krassilov, 2008). Paleobotanists have also identified a new species of *Weichselia*, a Mesozoic fern, in Early Cretaceous strata at Makhtesh Ramon, in southern Israel (Silantieva and Krassilov, 2006). Discoveries of terrestrial fauna include a new species of snake and a brachiosaur in Cretaceous deposits in Lebanon, a salamander in similar strata in Israel, and mammal remains that are too numerous to cite (Buffetaut et al., 2005; Caldwell, 2006; Nevo and Estes, 1969).

Recently, evolutionary geologists have begun to restrict the alleged expanse of the Tethys Ocean. In a comprehensive treatise, Stampfli and Borel (2002) cite numerous studies from Greece, Iran, Romania, Turkey, Italy, Georgia, Switzerland, and other locales and restrict the expanse of the Tethys Ocean (Alavi et al., 1997; Baumgartner, 1985; Bonneau, 1984; Cioflica et al., 1980; Fleury, 1980; Gutnic et al., 1979; Jurdy et al., 1995; Khain, 1994; Kozur, 1991; 1997; Krahl et al., 1983; Monod and Akay, 1984; Morris, 1996; Niocaill and Smethurst, 1994; Okay and Mostler 1994; Pickett and Robertson, 1996; Poisson, 1984; Powell and Li, 1994; Robertson, 1993; Seghedi et al., 1990; Sengor et al.,1980; Stampfli et al., 1991; Stampfli and Marchant, 1997; Stampfli and Pillevuit, 1993; Tuysuz, 1990; Waldron, 1984; Ziegler, 1990; Zonenshain et al., 1985). In addition they indicate from these geological studies that the area of eastern Turkey, the Tigris and Euphrates region, Israel, Lebanon, Syria, the Sinai Peninsula, and Africa was not covered by the Tethys but represented a vast expanse of terrestrial land, freed from the water, during the Mesozoic and Cenozoic. Their treatise coincides with paleontological and paleobotanical research, especially in regard to the aforementioned riot of terrestrial flora that has been discovered in deposits from Turkey to Arabia, in strata from Paleozoic (Ordovician) through Mesozoic (Cretaceous).

Other conclusions from recent geological studies include that the entirety of the Tigris, Euphrates, and the Orontes / Litani / Jordan rivers rest on geological foundations that descend to Precambrian strata (Ronov et al., 1977; Woodmorappe, 1981). Moreover, the Tigris and Euphrates rivers most likely

Figure 6. The southern end of the expanse that is now the Red Sea. The locale was originally a riverine environment whose southerly progression moved west, forming the East African Rift Valley (white arrows). Later in the Cenozoic, both shores of the valley divided forming the Red Sea. The imprint of this divide is readily apparent in satellite images (black angles).

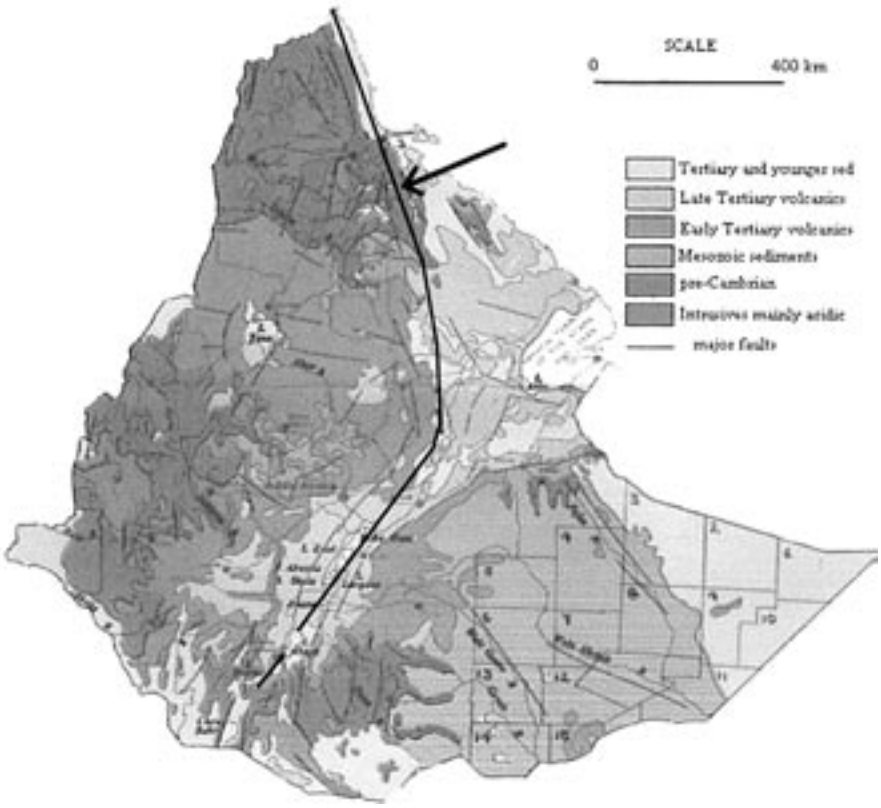

Figure 7. The geology of Ethiopia, exhibiting the Precambrian foundation of the East African Rift Valley (Black Arrow). Shown is the route of the river as it moved southwest from what is now the Red Sea (Black Line). The route to the sea was blocked by volcanic activity and the accumulation of sediment during the Tertiary (from Kazmin, 1973).

follow Precambrian faults similar to the Najd faults in northwestern Saudi Arabia (Moore, 1979; Woodmorappe, 2002). In addition, this area comprises strata from nearly every geological Paleozoic period, including the Ordovician, Silurian, and Carboniferous. Moreover, the foundations of the Red Sea and the Jordan Rift Valley, which comprises the Orontes, Litani, and Jordan rivers formed in the Precambrian. Dubertret (1970, p. 18) states that "the Red Sea structure as well as the appurtenant Dead Sea structure originated at the end of the Precambrian, as shown by many established observations."

Beginning in the Precambrian, the Red Sea was a narrowly confined valley, which became a riverine environment, whose southerly progression moved west, forming the structure of the East African Rift Valley. This valley moved through the center of Ethiopia, forming tributaries on either side of this waterway (Figure 6). Only during the Cenozoic, in the Oligocene and Miocene, did a wider marine trough develop. Later, in the Miocene and Pliocene, the two shores began to divide, forming the new floor of what is today the Red Sea and coinciding with the accumulation of limestone, marls, clays, and evaporates (Coleman, 1994; McKenzie et al., 1970).

Of note is that the East African Rift Valley rests on a Precambrian foundation. As the shores of the Red Sea divided during the Miocene and Pliocene, Tertiary sediment and volcanic activity surmounted the Precambrian foundation of the rift valley and blocked its route to the Sea (Alene and Barker, 1993; Atnafu and Bonavia, 1991; Kazmin, 1971; 1972a; 1972b; 1972c; 1973; 1975).

Also, the proposed origin of the Gihon is very near the modern location of the Ceyhan River in Turkey (Figure 8). It is noteworthy how similar both names appear. More remarkable is that the river was pronounced the *Jihun* or *Jechun* and was part of the ancient Hittite province of Adana. Greek civilizations

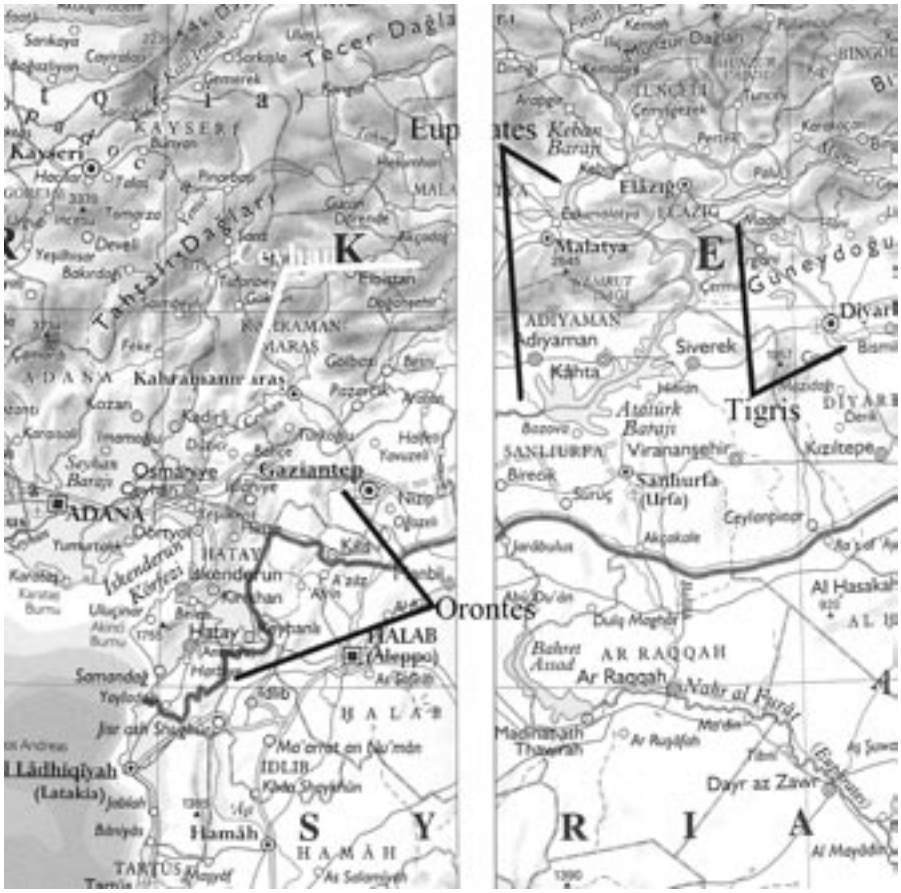

Figure 8. A map of modern Southeastern Turkey showing the origins of the Ceyhan, Orontes, Euphrates, and Tigris Rivers emerging from the same region.

called the river the Pyramus or Pyramos (**Πύραμος**).

Eastward

Eden also is described as located to the "east" or "eastward" in Genesis 2:8. The Biblical text seems to indicate that the direction of Eden is to the east of the author writing the text.

That the Garden of Eden was described as "to the east" or "eastward" by the author of Genesis may correlate with plate tectonics. As the Red Sea widened in the Tertiary, the Arabian plate moved north as the African plate moved south. This tectonic activity moved eastern Anatolia, the source of the Tigris, Euphrates, and the proposed Gihon and Pishon rivers, north and west over time. Today, the Arabian plate continues to move north and west (Figure 9). For geological creationists and evolutionary geologists, Anatolia has moved north and west throughout the geological history of the earth (Baumgardner, 1990; Okay and Tuysuz, 1999). Thus, there is consensus between extremely diverse positions that early in the history of the earth eastern Anatolia was southeast of its current position. If Anatolia has moved northwest over time, Anatolia was once *east* of the Sinai Peninsula, the location where many conservative Jewish and Christian theologians state Moses authored Genesis. Hence, Eden was located toward the east.

It is noteworthy that much of the severe tectonic activity in Anatolia occurred during the Late Cretaceous and Cenozoic Era. The Assyrian Suture, which separated the Tauride Block from the Arabian Platform, closed during the late Cenozoic. Moreover, this tectonic activity largely avoided the region of Eden. The modern city of Diyarbakir is approximately 100 kilometers south of Elazig, the center of the proposed region of Eden. Hence, the geological upheaval, between the Pontides and Tauride and Anatolide blocks, was more recent compared to geology of the region of Eden, with its Paleozoic foundation on the Arabian Platform (Figure 9).

Suggested Location of the Region of Eden

In light of the paleontological, paleobotanical, geological, and archaeological research and citations from a wide array evolutionists and creationists, I submit the ancient location of the region of Eden was in eastern Anatolia (Figure 10). Early in Earth's history, eastern Anatolia was east of the Sinai Peninsula, the locale where the author of Genesis wrote the first five books of the Bible. As the continents spread apart, eastern Anatolia moved northwest, away from Israel and the Sinai.

Providing additional support for Eden's location in eastern Anatolia are textual references about the kingdom of Beth Eden or the House of Eden. According to Assyrian sources, *Bit Adini* was an Aramaean state, in the tenth century B.C., which was conquered by Assyria (Roux, 1992). That the location of Beth Eden was close to Carchemish, near eastern Anatolia, provides additional support for the association between Eden and eastern Anatolia (Figure 10).

In addition, other Biblical passages refer to Eden. In 2 Kings and Isaiah, Sennacherib's messengers to King Hezekiah, mention a series of locales, which were conquered by Assyria before their march on Jerusalem.

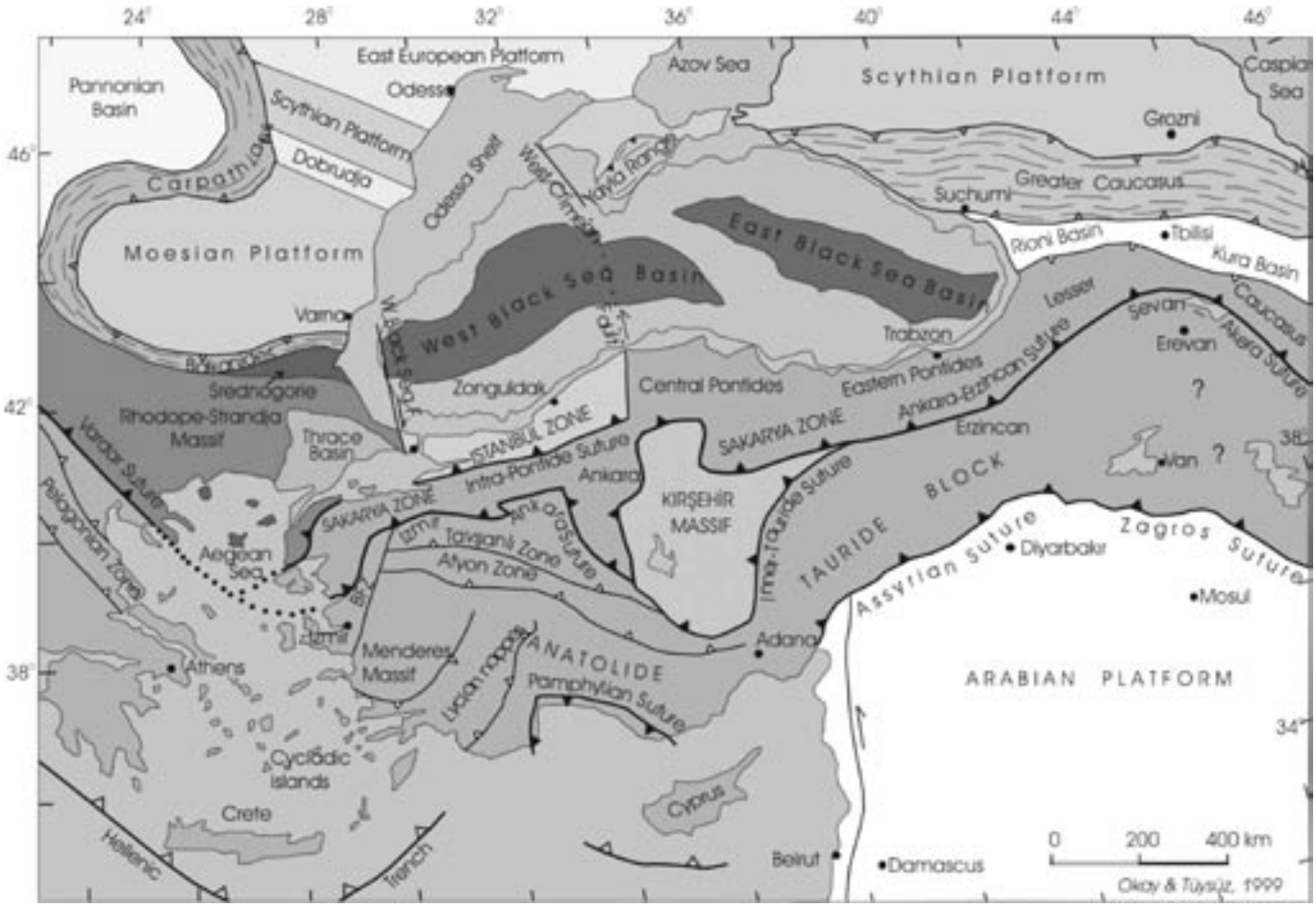

Figure 9. A tectonic map of Anatolia from Okay and Tuysuz (1999). The diagram shows the continuing pressure of the Arabian Platform against Eastern Anatolia, with the latter being pressed north and west.

Have the gods of the nations delivered them, which my fathers have destroyed, Gozan, and Haran, and Rezeph, and the sons of Eden who were in Telassar? (2 Kings 19:12).

> Have the gods of the nations saved those whom my fathers have destroyed, Gozan, and Haran, and Rezeph, and the sons of Eden in Telassar? (Isa. 37:12).

With regard to the claims of Sennacherib to Hezekiah, the association between the "sons of Eden" and Gozan, Haran, and Rezeph is noteworthy. All cities are located either in eastern Anatolia or in northwestern Mesopotamia, adjacent to Anatolia. With regard to the location of Telassar, Pinches (1915, p. 2925) notes:

> As Telassar was inhabited by the "children of Eden," and is mentioned with Gozan, Haran, and Rezeph, in Western Mesopotamia, it has been suggested that it lay in Bit Adini, "the House of Adinu," or Betheden, in the same direction, between the Euphrates and the Belikh. A place named Til-Assuri, however, is twice mentioned by Tiglath-pileser IV (Ann., 176; Slab-Inscr., II, 23), and from these passages it would seem to have lain near enough to the Assyrian border to be annexed.

The Prophet Ezekiel, in his lament for Tyre, notes that Eden traded with the doomed city.

> Haran, and Canneh, and Eden; the merchants of Sheba, Asshur, Chilmad were your merchants (Ezek. 27:23).

In this passage Eden is associated with Haran. Haran is located near or in eastern Anatolia (Figure 10). To summarize, Biblical passages outside of Genesis, as well as extrabiblical texts, suggest the region of Eden was either in or near eastern Anatolia. This supports both Sanders's (2001) and my proposed locations for Eden.

From the region of Eden emerged the four rivers of the Pishon, Gihon, Tigris, and Euphrates. The Tigris and Euphrates are evident today. The Pishon no longer exists but followed

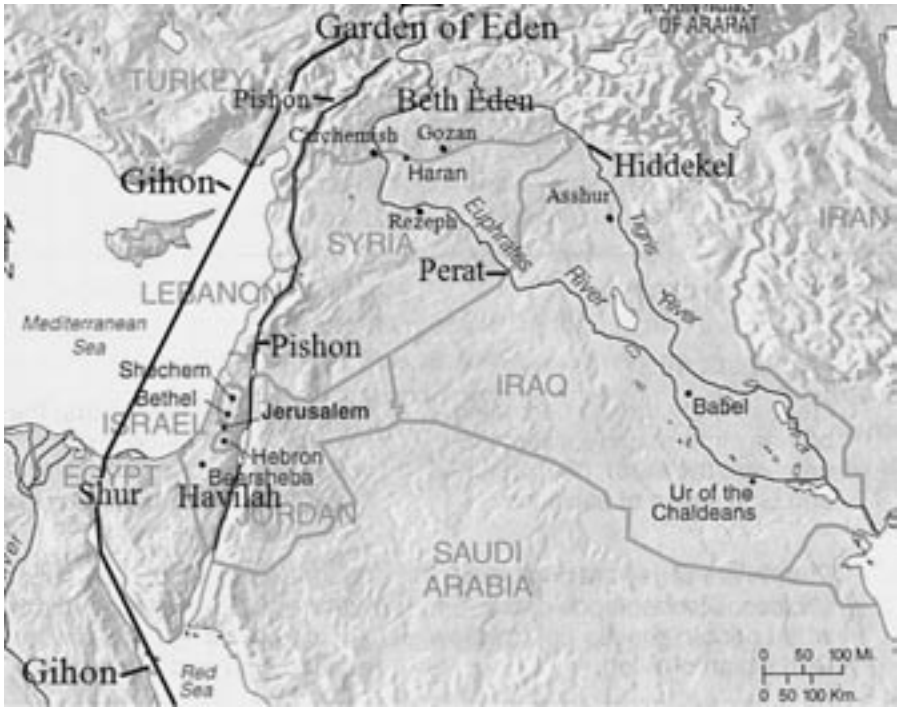

Figure 10. The suggested location of the Region of Eden, exhibiting the lands of Shur and Havilah, the ancient city of Asshur, and the routes of the Pishon, Gihon, Perat, and Hiddekel Rivers. The Perat (Euphrates) and Hiddekel (Tigris) continue today. The Pishon and Gihon halted with the expansion of the Mediterranean and Red seas, sediment accumulation, and volcanic activity, which evolutionary geologists allege occurred in the Tertiary.

the rift valley, which today comprises the Orontes, Litani, and Jordan Rivers. From the Jordan, the Pishon continued south through the once living Dead Sea to the Wadi HaArava and its tributaries, which spread throughout the land of Havilah. I suggest the ancient Gihon originated in eastern Anatolia, followed a route through what is now the eastern Mediterranean Sea, and through the western end of the Sinai Peninsula. From here the Gihon followed an ancient river, representing the modern Red Sea, which traveled west into Cush or modern Ethiopia (Figure 11).

Other Views and Discussion

In 2001, Michael Sanders proposed a location for the Garden of Eden in eastern Anatolia (Sanders, 2001). Sanders stated the source waters of the Tigris and Euphrates determined the ancient region of Eden. I disagree with his location of the *Gihon* and *Pishon* (Figure 12). For Sanders, the *Gihon* and *Pishon* were local rivers confined to eastern Anatolia. It is difficult to conceive how Sanders's thoughts regarding the *Gihon* and the *Pishon* associate with Biblical references to the lands of Havilah and Cush. Al-

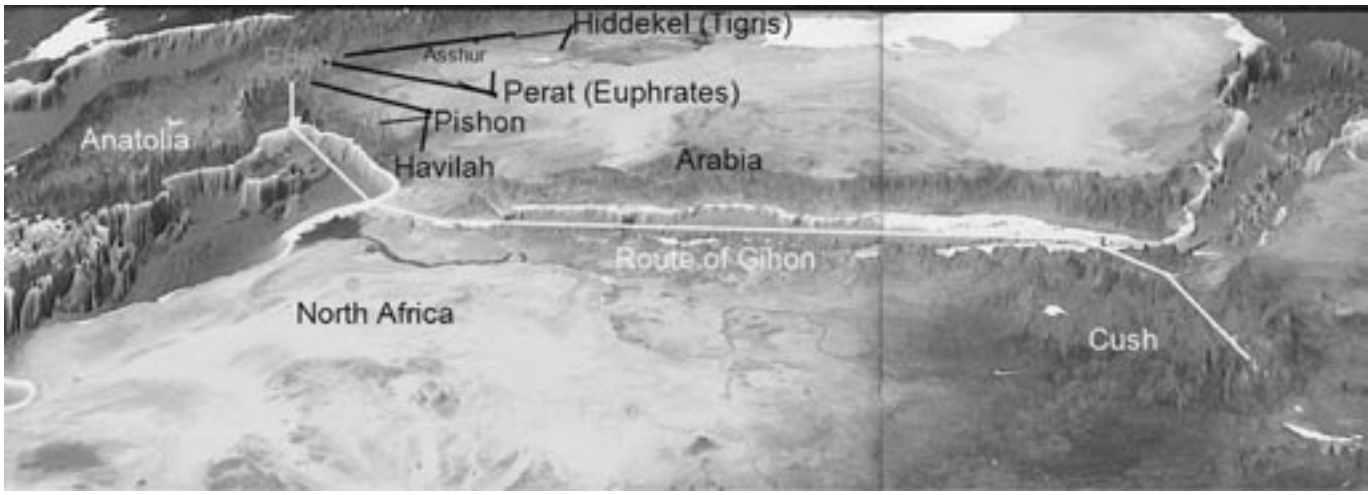

Figure 11. A satellite view of the region of Eden showing the lands of Havilah and Cush, the city of Asshur, and the routes of the Pishon, Gihon, Perat, and Hiddekel Rivers. The Perat (Euphrates) and Hiddekel (Tigris) continue today. The Pishon and Gihon do not exist today; their routes are evident by ancient rift valleys.

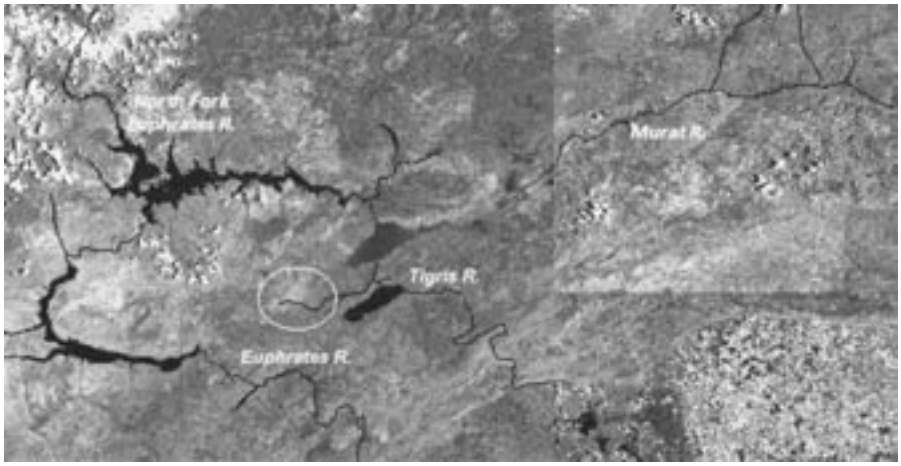

Figure 12. Satellite image of the proposed region of Eden in Eastern Anatolia (from Sanders, 2001).

though I find Sanders's locations of the *Pishon* and *Gihon* problematic, I agree with his proposed general location for Eden, in eastern Anatolia.

Recently, Jud Davis (2008) suggested that the ancient location of Eden should be associated with the current location of Jerusalem. He sites various scholars including Wenham (1986) and Tuell (2000) and ample Biblical citations (Ezek. 28:13–14; 36:22–36; 47:1–12; Pss. 46:4–5; 36:8; Isa. 33:20–21; Joel 3:18; and Zech. 14:8). However, on closer inspection, the link appears untenable. In Ezekiel 28:13–14, there seems to be a clear dichotomy between verse 13, which notes that the Devil once traveled in Eden, and verse 14, where the Evil One was also at the "holy mountain of God"—the latter possibly representing the mount of Jerusalem. In Ezekiel 36:35, the text is clear that the land of the future Messiah will be "*like* the garden of Eden" [emphasis added] but makes no connotation that Jerusalem represents the locale of ancient Eden. The remaining cited verses note two new rivers flowing from the messianic temple and no mention of an association with the ancient region of Eden. Of note, four rivers flowed from ancient Eden. To summarize, the aforementioned Scriptures clearly state that Jerusalem and the land of the Messiah will be comparable to ancient Eden; however, there appears to be no geographical tie between ancient Eden and the current location of Jerusalem or Israel.

In 1987 Juris Zarins and Dora Hamblin suggested that Eden was located underwater, near the delta of the Tigris and Euphrates rivers (Hamblin, 1987). Using LANSAT images; Zarins equated the *Pishon* with the Wadi al-Batin, which flowed northeast from Saudi Arabia. For Zarins, the Karun River, which flowed south from mountains of Iran, represented the *Gihon* River (Figure 13). There are several problems with Zarins's theory. First, his location of Eden puts this region at the destination and not the origin of the four rivers. Zarins's theory contradicts the Bible, which clearly states that all rivers proceeded "from" and not "to" Eden. Second, it is difficult to ascertain how Zarins's location of the *Gihon* equates with Cush or how the Wadi al-Batin connects to the land of Havilah. The Bible states that Havilah is in the northeastern Sinai Peninsula, near Moab and the Kenites. Zarins's satellite images show that the Wadi al-Batin extended south, was confined to the northeast of the Arabian Peninsula, and came nowhere near the Sinai.

Several creationists object to any potential discovery or search for the region of Eden (Hughes, 1997; Walker, 2001). Their position is that the Flood was so catastrophic that it completely changed the surface of the pre-Flood earth. For these scholars, attempting to locate Eden is an exercise in folly, because they argue that Noah and his descendants renamed all geographical locales and rivers after the floodwaters subsided. For them, all rivers and geographical locales after the Flood have no connection to features before the Flood. Walker (2001, p. 2) states, "The present Tigris and Euphrates Rivers have nothing to do with the rivers described in Genesis 2, except for their names."

The Bible leaves little doubt that the Flood affected the surface of the earth and its geography as evidenced by 2 Peter 3:5–6, which says that God used a mighty flood to destroy the ancient world; Genesis 7:11, which says God opened the waters of the great deep; Genesis 7:19–20, which declares that the Floodwaters covered the highest mountains; and other texts that show the Flood covered the earth and extirpated all creatures with the breath of life (e.g., Genesis 7:22–23). These verses definitively counter the "gentle-flood" hypothesis proffered by some who disregard the veracity and inerrancy of Scripture and propose that the Flood was only local to the Tigris-Euphrates region (e.g., Hill, 2002). The existence of two rivers from Eden, the *Pishon* and *Gihon*, are not mentioned after the second chapter of Genesis. The Flood presumably affected these rivers, although the connection between the disappearance of these rivers and the Flood is inferred and not stated by the author of Genesis.

Many forefathers of the church, including St. Augustine and Calvin, treated the Garden of Eden as both a historical and physical reality. Alessandro Scafi notes that in the Torah "a

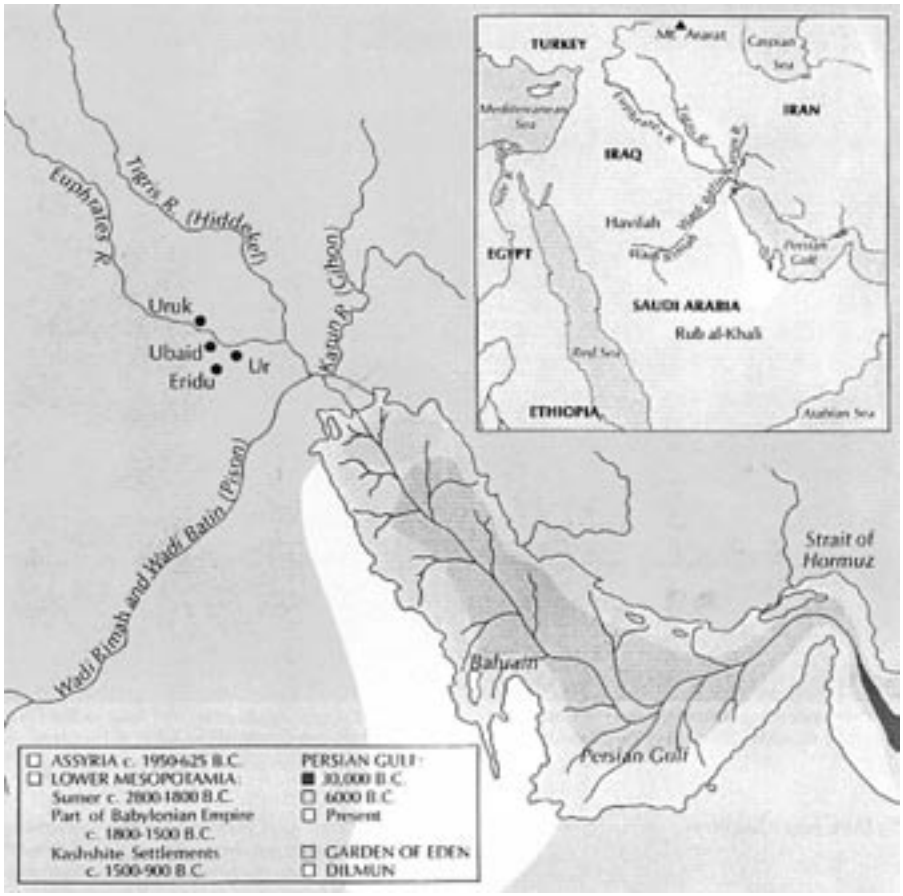

Figure 13. Hamblin and Zarins's proposed location of Eden at the end of the Tigris and Euphrates rivers (from Hamblin, 1987).

garden in Eden" is qualified by *miqedem*, a word with both spatial and temporal senses. In the Latin Vulgate, the Garden is described as *in principio* (in the beginning). In the *Glossa Ordinaria*, the Garden is *in oriente* (in the east). However, Augustine Steuchus, Calvin, Luther, and others also believed that there was some continuity in the geography of Eden, especially in the Biblical references to the Tigris and Euphrates, before and after the Flood. Hence, the veracity of Scripture depended on Eden being a historical and spatial reality, with an element of geographical continuity after the Flood (Scafi, 2006).

The argument that no geographical continuity existed before and after the Flood is questionable. The Pishon and Gihon represent the remains of rift valleys founded in Precambrian strata. In light of the Flood, these valleys would have provided a drainage avenue during the abative phase of the Deluge–a phase espoused by most Flood geologists, including Walker (1994). Furthermore, Woodmorappe (2002, p. 106) suggests that after the Flood, the Tigris and Euphrates rivers "reappeared at or close to" antediluvian locations as they originated on Precambrian faults whose rift structures would remain despite the deposition of flood sediment. Therefore, it seems suspect that no trace of the rivers of Eden would remain after the Flood.

Also, many creationists espouse that the Bible is the inerrant Word of God. Hence, it seems odd that Moses, the author of Genesis, would attach the name "*Perat*" to two waterways—before and after the Flood, in Genesis 2:14 and 15:18—which had no geographical association (McDowell 1999; Philo 1935). On theological grounds it seems suspect that this author of the inerrant Word of God, breathed by the Holy Spirit, would apply the name "*Perat*" or "*Hiddekel*" to rivers existing before and after the Flood, which had "nothing to do" with each other.

The author of Genesis specifies that the *Hiddekel* was "the one going east of Asshur," the ancient capital of Assyria (Gen. 2:14). It seems doubtful that Moses would describe one of the rivers from Eden (the *Hiddekel*) being "east of Asshur," if the geographical location of this river at the time of creation had "nothing to do" with this location after the Flood.

Further, the author of Genesis describes three of the four rivers in association with post-Flood regions or a city. The *Hiddekel* is tied to the city of Asshur (Gen. 2:14). The *Pishon* is associated with the land of Havilah (Gen. 2:11). The *Gihon* is correlated with the land of Cush (Gen. 2:13). That the *Hiddekel*, *Pishon*, and *Gihon* before the Flood would have "nothing to do" with these areas after the Flood, despite Moses clearly identifying these post-Flood geographical associations, seems incongruous with Scripture.

It is a biblical fact that the Flood was universal, covered the earth, altered the geography of the earth, and dispatched all human and terrestrial animal life outside the ark. However, the argument that the Flood changed the entire surface of the pre-Flood earth, to the extent that there was no geographical continuity before and after the Flood, seems untenable. This position conflicts with the second chapter of Genesis, other Biblical passages, the Hebrew patriarchs, and the documented views of many forefathers of the Christian church.

The search for the region of Eden is a controversial but worthwhile endeavor, which has broad implications for future

research. In future research, scholars should compare the geology, fauna, flora, site formation processes, and radiometric dating, inside and outside this region.

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CRSQ: Creation Research Science Quarterly

PPP: Palaeogeography, Palaeoclimatology, Palaeoecology

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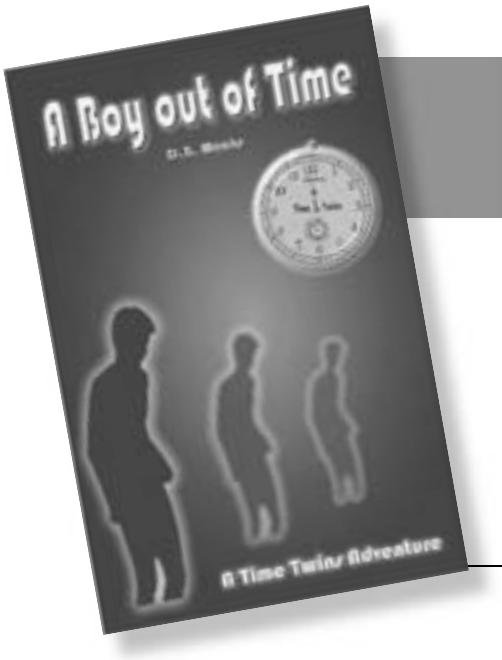

Book Review

A Boy Out of Time: A Time Twins Adventure

by D. B. Macks

Booklocker.com, Inc.,
248 pages, $15.00.

Ben Javan is the 14-year-old son of archeologists, small for his age, bullied at school and guilt-ridden over the death of his sister by drowning while he was supposed to be watching her. When his parents leave for a dig in Turkey, he gets to spend the summer with his mysterious physicist uncle who lives in an isolated area of Alaska where Ben will also get to meet a boy his own age named Seth, with whom he has been an instant messaging pen pal.

What follows is a time travel sci-fi adventure that takes the boys and the adults back to the pre-flood world where people are both technologically advanced and endowed with unusual physical and mental powers. That world is succumbing to spiritual darkness most evident in the Nephilim.

Promotion of moral courage, commitment to biblical accuracy, awareness of spiritual warfare, and development of interesting protagonists take place in a world that has flavors of Narnia, Middle Earth, and the realm of Darth Vader. The story just might be a reasonable guess at that real antediluvian history that is only summarized in Genesis. Intended as the kick-off of a series, this book stands a chance of dragging kids away from their video games.

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