# Has the Garden of Eden been located at last?

### By Dora Jane Hamblin

By using an interdisciplinary approach, archaeologist Juris Zarins believes he's found it--and can pinpoint it for us. The author, a frequent contributor, met Dr. Zarins and his Eden theory when writing of Saudi archaeology (September 1983) and has followed his work since.

"And the Lord God planted a garden eastward in Eden; and there he put the man whom he had formed" (Genesis 2:8). Then the majestic words become quite specific: "And a river went out of Eden to water the garden; and from thence it was parted, and became into four heads. The name of the first is Pison: that is it which compasseth the whole land of Havilah, where there is gold; And the gold of that land is good: there is bdellium and the onyx stone. And the name of the second river is Gihon: the same is it that compasseth the whole land of Ethiopia. And the name of the third river is Hiddekel [Tigris]: that is it which goeth toward the east of Assyria. And the fourth river is Euphrates" (Genesis 2:10-14).

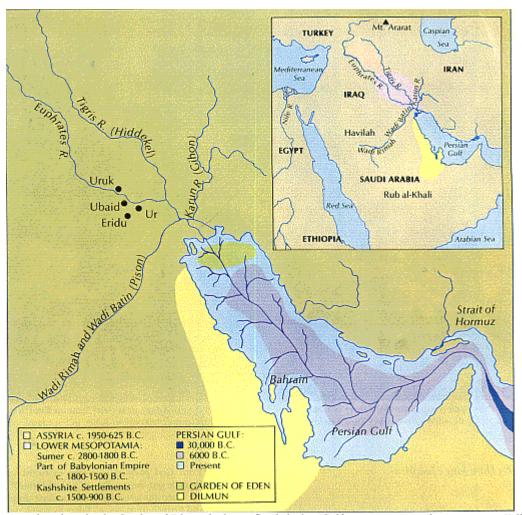
But where now are the Pison and the Gihon? And where, if indeed it existed as a geographically specific place, was the Garden of Eden? Theologians, historians, ordinary inquisitive people and men of science have tried for centuries to figure it out. Eden has been "located" in as many diverse areas as has lost Atlantis. Some early Christian fathers and late classical authors suggested it could lie in Mongolia or India or Ethiopia. They based their theories quite sensibly on the known antiquity of those regions, and on the notion that the mysterious Pison and Gihon were to be associated with those other two great rivers of the ancient world, the Nile and the Ganges.

Another favorite locale for the Garden had been Turkey, because both the Tigris and the Euphrates rise in the mountains there, and because Mount Ararat, where Noah's Ark came to rest, is there. In the past hundred years, since the discovery of ancient civilizations in modern Iraq, scholars have leaned toward the Tigris-Euphrates valley in general, and to the sites of southern Sumer, about 150 miles north of the present head of the Persian Gulf, in particular (map, above).

To this southern Sumerian theory Dr. Juris Zarins, of Southwest Missouri State University in Springfield, would murmur: "You're getting warmer. For Dr. Zarins, who has spent seven years working out his own hypothesis, believes that the Garden of Eden lies presently under the waters of the Persian Gulf, and he further believes that the story of Adam and Eve in-and especially *out-of* the Garden is a highly condensed and evocative account of perhaps the greatest revolution that ever shook mankind: the shift from hunting-gathering to agriculture.

No single scholarly discipline will suffice to cover the long, intricate road Zarins has followed to arrive at his theory. He began, as many another researcher has, with the simple Biblical account, which "I read forward and backward, over and over again." To this he added the unfolding archaeology of Saudi Arabia (SMITHSONIAN, September 1983), where he spent his field time for more than a decade. Next he consulted the sciences of geology, hydrology and linguistics from a handful of brilliant 20th-century scholars and, finally, Space Age technology in the form of LANDSAT space images.

It is a tale of rich complexity, beginning 30 millennia before the birth of Christ. Of climatic shifts from moist to arid to moist, with consequent migrations eddying back and forth across, and up and down the Middle East. And of myriad peoples. There were hunter-gatherers whom agriculturists displaced. There were prehistoric Ubaidians who built cities, Sumerians who invented writing and the Assyrians who absorbed Sumer's writing as well as its legend of a luxuriantly lovely land, an Eden called Dilmun. Finally there were Kashshites in Mesopotamia, contemporaries of the Israelites then forming the state of Israel.



The area thought to be the Garden of Eden, which was flooded when Gulf waters arose, is shown in green. Yellow areas of Bahrain and Arabian coast represent Dilmun, paradise land of Ubaidians and Sumerians

# An endless search for food

There are two crucial if approximate dates in reconstruction. The first is about 30,000 B.C., with the transition from Neanderthal to modern Man. This, some anthropologists believe, took place along the eastern shore of the Mediterranean and Aegean seas and in Iraq. At that time the Great Ice Age still held most of Eurasia in its grip, and it caused the sea levels to fall by 400 feet so that what is now the Persian Gulf was dry land, all the way to the Strait of Hormuz. It was irrigated not only by the still-existing Tigris and Euphrates but also by the Gihon, the Pison and their tributaries from the Arabian peninsula and from Iran. It seems reasonable that technologically primitive but modern Mm, in his endless search for food, would have located the considerable natural paradise that presented itself in the area where the Gulf now lies.

But Eden wasn't born then. That came, Zarins believes, about 6000 B.C. In between 30,000 and 6000 B.C., the climate varied. From 15,000 B.C., rainfall diminished drastically. Faced with increasing aridity, the Paleolithic population retreated, some as far as the area known to us as the "Fertile Crescent" (north along the Tigris and Euphrates, westward toward the moist Mediterranean coast, south to the Nile), and also eastward to the Indus River valley. Others, perhaps wearied by the long trek, made do with the more austere conditions of central Arabia and continued foraging as best they could.

Then, at about 6000 to 5000 B.C., following a long arid stretch, came a period called the Neolithic Wet Phase when rains returned to the Gulf region. The reaches of eastern and northeastern Saudi Arabia and southwestern Iran became green and fertile again. Foraging populations came back to where the four rivers now ran full, and there was rainfall on the intervening plains. Animal bones indicate that in this period Arabia had abundant game. Thousands of stone tools suggest intensive, if seasonal, human occupation around now dry lakes and rivers. These tools are found even in the Rub al-Khali or Empty Quarter of Saudi Arabia. And so about 6000 to 5000 B.C. the land was again a paradise on Earth, provided by a bountiful nature-God---and admirably suited to the foraging life.

This time, however, there was a difference: agriculture had been invented. Not overnight-"It was a very gradual process, not an event," Zarins emphasizes. It grew up along the Mediterranean coast and in today's Iran and Iraq as groups of hunter-gatherers evolved in-to agriculturists. Foragers from central Arabia, returning to the southern Mesopotamian plain, found it already resettled by these agriculturists. Because the process occurred before writing was invented, there is no record of what upheavals the evolution caused, what tortured questions about traditional values and life-styles, what dislocations of clans or tribes. Zarins posits that it must have been far more dramatic than the infinitely later Industrial Revolution, and an earthquake in comparison with today's computer-age discombobulation of persons, professions and systems.

"What would happen to a forager when his neighbors changed their ways or when he found agriculturists had moved into his territory?" Zarins asks. These agriculturists were innovative folk who had settled down, planted seeds, domesticated and manipulated animals. They made the food come to them, in effect, instead of chasing it over hill and dale. What would the forager do if he couldn't cope? He could die; lie could move on; he could join the agriculturists. But whatever happened, he would resent it."

# Eden, Adam, and the birth of writing

The crunch came, Zarins believes, here in the Tigris and Euphrates valleys and in northern Arabia, where the hunter-gatherers, flooding in from less hospitable regions, were faced with more technically accomplished humans who knew how to breed and raise animals, who made distinctive pottery, who seemed inclined to cluster in settled groups. Who were these people? Zarins believes they were a southern Mesopotamian group and culture now called the Ubaid. They founded the oldest of the southern Mesopotamian cities, Eridu, about 5000 B.C. Though Eridu, and other cities like Ur and Uruk, were discovered a century ago, the Ubaidian presence down along the coast of Kuwait and Saudi Arabia has been known for little more than a decade, when vestiges of their settlements, graves and distinctive pottery turned up.

It was in Saudi Arabia that Zarins encountered the Ubaidians, and there that he began developing his hypothesis about the true meaning of the Biblical Eden. One clue lies in linguistics: the term Eden, or Edin, appears first in Sumer, the Mesopotamian region that produced the world's first written language. This was in the third millennium B.C., more than three thousand years after the rise of the Ubaid culture. In Sumerian the word "Eden" meant simply "fertile plain." The word "Adam" also existed in cuneiform, meaning something like "settlement on the plain." Although both words were set down first in Sumerian, along with place names like Ur and Uruk, they are not Sumerian in origin. They are older. A brilliant Assyriologist named Benno Landsberger advanced the theory in 1943 that these names were all linguistic remnants of a pre-Sumerian people who had already named rivers, cities-and even some specific trades like potter anti coppersmith-before the Sumerians appeared.

Landsberger called the pre-Sumerian language simply Proto-Euphratian. Other scholars suggest that its speakers were the Ubaidians. However it was, the existing names were incorporated into Sumerian and written down for the first time. And the mythology of the lush and lovely spot called Eden was codified by being written.

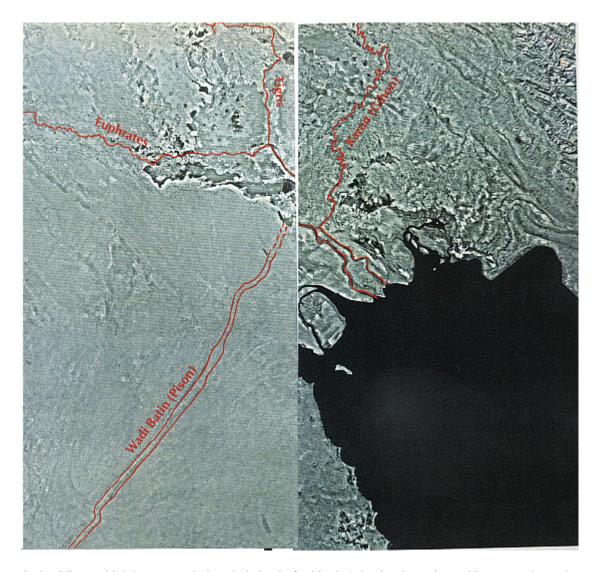
"The whole Garden of Eden story, however, when finally written, could be seen to represent the point of view of the hunter gatherers," Zarins reasons. "It was the result of tension between the two groups, the collision of two ways of life. Adam and Eve were heirs to natural bounty. They had everything they needed. But they sinned and were expelled. How did they sin? By challenging God's very omnipotence. In so doing they represented the agriculturists, the upstarts who insisted on taking matters into their own hands, relying upon their knowledge and their own skills rather than on His bounty.

There were no journalists around to record the tension, no historians. But the event did not go unnoticed. It became a part of collective memory and at long last it was written down, highly condensed, in *Genesis*. It was very brief, but brevity doesn't mean lack of significance."

How did it happen that an advanced people would perpetuate a myth making their own ancestors the sinners? It may be that the Ubaidians, who are known to have sailed down the east coast of Arabia and colonized there, ran into descendants of foragers displaced from a drowning Eden, from them heard the awful story of the loss of paradise and repeated it until it became their own legend. Or it may be that, responding to the increasing pressures and stresses of a society growing in complexity, they found comfort in a fantasy of the good old days, when life had been sweeter, simpler, more idyllic. However, it was a tale firmly established in Ubaidian mythology, then adopted and recorded by the Sumerians.

### LANDSAT spots a "fossil river"

At this stage in his thesis, Zarins goes back to geography and geology to pinpoint the area of Eden where he believes the collision came to a head. The evidence is beguiling: first, *Genesis* was written from a Hebrew point of view. It says the Garden was "eastward," i.e., east of Israel. It is quite specific about the rivers. The Tigris and the Euphrates are easy because they still flow. At the time *Genesis* was written, the Euphrates must have been the major one because it stands identified by name only and without an explanation about what it "compasseth." The Pison can be identified from the Biblical reference to the land of Havilah, which is easily located in the Biblical Table of Nations (*Genesis* 10:7, 25:18) as relating to localities and people within a Mesopotamian-Arabian framework. Supporting the Biblical evidence of Havilah are geological evidence on the ground and LANDSAT images from space. These images clearly show a "fossil river," that once flowed through northern Arabia and through the now dry beds, which modern Saudis and Kuwaitis know as the Wadi Riniah and the Wadi Batin. Furthermore, as the Bible says, this region was rich in bdellium, an aromatic gum resin that can still be found in north Arabia, and gold, which was still mined in the general area in the 1950s.



It is the Gihon, which "compasseth the whole land of Ethiopia," that has been the problem. In Hebrew the geographical reference was to "Gush" or "Kush." The translators of the King James Bible in the 17th century rendered Gush or Kush as "Ethiopia"---which is further to the south and in Africa--thus upsetting the geographical applecant and flummoxing researchers for centuries. Zarins now believes the Gihon is the Karun River, which rises in Iran and flows southwesterly toward the present Gulf. The Karun also shows in LANDSAT images and was a perennial river which, until it was dammed, contributed most of the sediment forming the delta at the head of the Persian Gulf.

Thus the Garden of Eden, on the geographical evidence, must have been somewhere at the head of the Gulf at a time when all four rivers joined and flowed through an area that was then above the level of the Gulf. The wording in *Genesis* that Eden's river came into four heads" was dealt with by Biblical scholar Ephraim Speiser some years ago: the passage, he said, refers to the four rivers upstream of their confluence into the one river watering the Garden. This is a strange perspective, but understandable if one reflects that the description is of a folk memory, written millennia after the events encapsulated, by men who had never been within leagues of the territory.

It was Speiser again who suggested that the mysterious Gush or Kush should be correctly written as Kashshu and further that it refers to the Kashshites, a people who, in about 1500 B.C, conquered Mesopotamia and prevailed until about 900 B.C. This Zarins considers a vital clue. "At the time the Kashshites were in control in Mesopotamia, the nation of Israel was being formed. The Hebrews must

certainly have encountered them, and learned the handed-down traditions of early Mesopotamia, the myths and tales. They must have heard the words Eden and Adam."

The name Eve does not appear in Sumerian but there is a most intriguing link---the account of Eve's having been fashioned from Adam's rib in the Garden story. Why a rib? Well, in a famous Sumerian poem translated and analyzed by scholar Samuel Noah Kramer, there is an account of how Enki the water god angered the Mother Goddess Ninhursag by eating eight magical plants that she had created. The Mother Goddess put the curse of death on Enki and disappeared, presumably so she couldn't change her mind and relent. Later, however, when Enki became very ill and eight of his "organs" failed, Ninhursag was enticed back. She summoned eight healing deities, one for each ailing organ. Now the Sumerian word for "rib" is "ti.," but the same word also means "to make live." So the healing deity who worked on Enki's rib was called "Nin-ti" and, in a nice play on words, became both the "lady of the rib" and the "lady who makes live." This Sumerian pun didn't translate into Hebrew, in which the words for "rib" and "to make live" are quite different. But the rib itself went into the Biblical account and as "Eve" came to symbolize the "mother of all living."

This and other ties with Sumerian myth are very clear, and Zarins finds it telling that although the Hebrews had close associations with Egypt, their earliest spiritual roots were in Mesopotamia. "Abraham journeyed to Egypt, Joseph journeyed to Egypt, the whole Exodus story is concerned with Egypt, but there is nothing whatever Egyptian about the early chapters of *Genesis*," he points out. "All these early accounts are linked to Mesopotamia. Abraham indeed is said to have come from Ur, at the time near the Gulf, and the writers of *Genesis* wanted to link up with that history. So they drew from the literary sources of the greatest civilization that had existed, and that was in Mesopotamia. In so doing they turned Eden into the Garden, Adam into a man, and a compacted history of things that occurred millennia before was pressed into a few chapters."

Long before *Genesis* was written, Zarins believes, the physical Eden had vanished under the waters of the Gulf. Man had lived happily there. But then, about 5000 to 4000 B.C. came a worldwide phenomenon called the Flandrian Transgression, which caused a sudden rise in sea level. The Gulf began to fill with water and actually reached its modern-day level about 4000 B.C., having swallowed Eden and all the settlements along the coastline of the Gulf. But it didn't stop there. It kept right on rising, moving upward into the southern legions of today's Iraq and Iran.

"The Sumerians always claimed that their ancestors came 'out of the sea,' and I believe they literally did," says Zarins. "They retreated northward into Mesopotamia from the encroaching waters of the Gulf, where they had lived for thousands of years."

Their original "Eden" was gone but a new one called Dilmun, on higher ground along the eastern coast of Arabia, enters the epics and the poems in the third millennium i.e. The by then ancient mythology of a land of plenty, of eternal life and peace, had lodged firmly in the collective mind and in a specific geographical area.

The scholarly world first heard about Dilmun a little more than a century ago, when scholars were able to decipher cuneiform tablets unearthed by archaeologist Austen Henry Layard in Nineveh. an Assyrian stronghold in today's Iraq. Its earliest mention was in economic texts referring to traffic in people and goods. On later tablets, to their astonishment. scholars began reading, in literature, not only about Eden and Adam and the "lady of the rib" but also about a Great Flood, a Sumerian hero called Gilgamesh and his search for the Tree of Life. There was even a serpent. Gilgamesh had gone "down" from Sumer to the Gulf area where he had been told he would find a plant that would give him eternal life. "What he found may have been coral, which in antiquity was a symbol of eternal life," Zarins explains. "And after his labors lie went to sleep and a serpent came along and stole his eternal life--his coral, maybe. Now it may not have been a serpent as we think of one, but instead one of those beautiful feathery creatures that Assyrians depicted in reliefs. But the descriptions of Dilmun are of an area that fits what I've been saying, where societies could exist at the will and bounty of God, in a beautiful setting."

# A land for commerce and consecration

There is a curious dichotomy in Dilmun as economic center and also as hallowed place of legend. Its exact location has been a debated issue. It is Zarins'---and most scholars'---conviction that it was the islands of Bahrain and Failaka and the eastern coast of Saudi Arabia. "The island of Bahrain was the Hong Kong of its era," lie says, "a rich hub of international trade, with ships coming and going between Mesopotamia and the Indus Valley civilization. Both there and on the eastern coast of Saudi Arabia are tens of thousands of tumuli---far more than the sparse indigenous population would have accounted for-some very rich tombs, most dating to the period 2500 to 1900 B.C.

Some suggest close ties with the Sumerians. Eden was gone so they would want to go to the paradise land of Dilmun either for pilgrimages or as the site of their final resting place. After all, if riches or eternal life were to be had in this area, they might as well get in on it."

One final question must be asked. Why, when the Israelites accepted the ancient stories of Mesopotamia-Arabia, with all their freight of long-forgotten struggles, climatic changes, half-forgotten traditions, did they choose the word Eden instead of Dilmun?

"Perhaps they never heard of the word Dilmun," says Zarins. "We don't really know. Archaeologist Daniel Potts is working on that problem right now:

Did the word Dilmun exist in Hellenistic times? There was a linguistic break in Alexander the Great's time. The wedgelike cuneiform was replaced by the alphabetic writing of the Greeks, a much more efficient system. Power passed from the East to the West, to Greece and Rome. The old stories, the old words, faded into obscurity because power goes to those who have it. Until the discovery of the Nineveh tablets, Assyrian cuneiform was dead. Early translators never heard of it. The name and concept of Eden were transmitted not through the Sumerian language of Dilmun but through the Hebrew-Hellenistic one of Eden."

It is an accident of history, of archaeology, of translation, perhaps, that Dilmun was lost and Eden remained. It should not shake the faith of any intelligent human being. If Zarins is correct, there is embedded in the Bible a very ancient folk memory, not only the story of Creation but also the story of Man's emergence from total dependence to perilous self-reliance, with all the man-made dangers incipient therein.

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