

The Exodus

By

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Introduction

This paper discusses the events that led to the Exodus and the route the Israelites took when Moses led them out of Egypt to the mountain from which God gave him the Ten Commandments. However, this story really began with Joseph. If he had not been sold to merchants, taken to Egypt, and given a high position by Pharaoh, the Exodus would not have occurred.¹

Joseph

Joseph was the second youngest of the twelve sons of Jacob. Jacob loved Joseph more than he loved his other sons, and because of this, Jacob's brothers hated him and were unfriendly toward him. Jacob dreamt that he and his brothers were binding sheaves in the field, and his brothers sheaves bowed down to his sheaf. Joseph also had a dream where the sun, moon, and eleven stars bowed down to him. Joseph related these dreams to his brothers, and they hated him even more. The brothers were so angry that they sold Joseph to merchants who took him to Egypt. He was sold to Potiphar, an officer at the court of Pharaoh (Gen. 37:1-36, New American Study Bible).

Potiphar made Joseph his personal servant. One day, Potiphar's wife asked Joseph to lie with her, but he refused. However, the wife told her master, and he imprisoned Joseph. Even though he was imprisoned, he helped some influential people to understand their dreams. Later, the Pharaoh had a dream:

Now it happened at the end of two full years that Pharaoh had a dream, and behold, he was standing by the Nile. And lo, from the Nile there came up seven cows, sleek and fat; and they grazed in the marsh grass. Then behold, seven other cows came up after them from the Nile, ugly and gaunt, and they stood by the other cows on the

bank of the Nile. The ugly and gaunt cows ate up the seven sleek and fat cows. Then Pharaoh awoke (Gen. 41:1-4).

He fell asleep and dreamed a second time; and behold, seven ears of grain came up on a single stalk, plump and good. Then behold, seven ears, thin and scorched by the east wind, sprouted up after them. The thin ears swallowed up the seven plump and full ears. Then Pharaoh awoke, and behold, it was a dream (Gen. 41:5-7).

Pharaoh asked Joseph to interpret these dreams. Joseph told Pharaoh that there would be seven years of good harvests in Egypt followed by seven years when crops would fail. He also advised Pharaoh about what Egypt should do to cope with the crisis. Pharaoh realized that Joseph was protected and guided by God, and gave him the task of highest administrator in the country, second only to Pharaoh himself. He also gave Joseph the Egyptian name Zaphenath-paneah and a wife named Asenath (Gen. 41:14-45).

Joseph made sure that Egypt stored enough food to prepare for the upcoming years of famine. When the famine came, it affected Egypt and all the countries in the region. People from other countries learned that Egypt had prepared for the years of famine and came to Egypt to buy seed and food. The land of Canaan also experienced a food shortage. Joseph's father, Jacob, sent his sons to Egypt to buy grain. Ten of his sons went to Egypt, and Benjamin remained at home (Gen. 41:49-42:4).

As the chief administrator, Joseph was responsible for the sales of grain. He met his brothers, and they begged him to buy the grain. Joseph recognized his brothers, but they did not recognize Joseph. Joseph demanded to see his remaining brother Benjamin and held his brother Simeon prisoner. Joseph also arranged for them to receive all the grain they wanted to buy (Gen. 42:6-36).

¹ J. Long, *The Riddle of the Exodus*, p. 151.

When the eleven brothers returned to Egypt, Joseph asked about his father, told he was well, and was pleased to see his brother Benjamin. Eventually, Joseph revealed his true identity to his brothers, and hugged all of them (Genesis 43:16-45:15).

Pharaoh learned that Joseph's brothers were in the country. He told Joseph to move his father and family to Egypt. He even offered to provide wagons and donkeys to make it easier to move. Jacob agreed to leave Canaan and move his family of 70 to Egypt. They settled in the fertile Nile delta area called Goshen, or Rameses (Genesis 45:21-46:28).

"Yaakov's descendants all lived in Goshen. As long as Yaakov's sons, the Tribes, were alive, the Bnai Yisrael avoided any social contact with their Egyptian neighbors. But after the death of the Tribes, the Jews began to enter Egyptian society. They no longer wanted to be confined to Goshen. They filled the land, mingling with the Egyptians and attending their theaters and circuses. They felt attracted to the Egyptian cult of animal worship and imitated the Egyptian practices. The Tribe of Levi, though, and the tzaddikim of the other Tribes never became idol worshippers."²

Pharaoh's Decrees

God caused the Jewish women to give birth to sextuplets. The Egyptians were concerned about the growing Jewish population because the Israelites might start a war to retrieve the riches taken during the years of famine. God noticed that the assimilation was progressing, and caused the Egyptians to hate the Jews.³

Pharaoh devised a plan to weaken the Israelites. He decided to renovate and fortify the cities of Pithom and Rameses. To attract the Jews, Pharaoh himself appeared with a spade and shovel in his hand. Many Egyptians and Israelites enrolled. The first month, Pharaoh paid the workers. Gradually, the numbers of Egyptians disappeared, and after sixteen months, only the Jews labored. The Jews were also informed

² M. Weissman, The Midrash Says: The Book of Sh'mos, p. 1

³ Ibid, p. 2-3.

that they would not be paid for their work.⁴ Eventually overseers were placed over them and they were treated as slaves.

When Pharaoh issued the original proclamation to the Hebrews, the Levites did not appear because they were engaged in studying the Torah and had no time to work.⁵

Observing that the Jews were tolerating the poor conditions, Pharaoh devised another plan to exterminate the Jews. He ordered two Jewish midwives to kill all newborn Jewish males, but allow only the girls to live. The midwives decided not to obey Pharaoh because they feared God more. The Pharaoh soon learned that no babies were killed and delivered his third decree to throw all baby Jewish boys into the Nile River.⁶ Moses was born during this difficult period.

Moses' mother decided to put her baby in an ark, or basket, and place the basket in the Nile. Pharaoh's daughter found the ark and baby and raised the child as her own. Moses learned how to fight as an Egyptian and defeated the Ethiopian army. Later, Moses witnessed an Egyptian mistreating a Jew and killed the Egyptian. Moses escaped from Egypt and fled to Midian. While in the land of Midian, Moses became a shepherd.⁷

Burning Bush

Now Moses was pasturing the flock of Jethro his father-in-law, the priest of Midian; and he led the flock to the west side of the wilderness and came to Horeb, the mountain of God. The angel of the LORD appeared to him in a blazing fire from the midst of a bush; and he looked, and behold, the bush was burning with fire, yet the bush was not consumed. So Moses said, "I must turn aside now and see this marvelous sight, why the bush is not burned up." (Exodus 3:1-3)

God revealed Himself as a thornbush to demonstrate to Moses that He was suffering along the children of

⁴ Ibid, p. 5.

⁵ Ibid, p. 6.

⁶ Ibid, p. 8-13.

⁷ Ibid, p. 17-33.

Israel and that no place is devoid of the Divine presence. Furthermore, the thornbush reassured Moses that the Jewish people would never be exterminated by its enemies.⁸

The LORD said, "I have surely seen the affliction of My people who are in Egypt, and have given heed to their cry because of their taskmasters, for I am aware of their sufferings. "So I have come down to deliver them from the power of the Egyptians, and to bring them up from that land to a good and spacious land, to a land flowing with milk and honey, to the place of the Canaanite and the Hittite and the Amorite and the Perizzite and the Hivite and the Jebusite. "Now, behold, the cry of the sons of Israel has come to Me; furthermore, I have seen the oppression with which the Egyptians are oppressing them. "Therefore, come now, and I will send you to Pharaoh, so that you may bring My people, the sons of Israel, out of Egypt." (Exodus 3:7-10)

Moses begins to object to the command that God has given him. But Moses said to God, "Who am I, that I should go to Pharaoh, and that I should bring the sons of Israel out of Egypt?" And He said, "Certainly I will be with you, and this shall be the sign to you that it is I who have sent you: when you have brought the people out of Egypt, you shall worship God at this mountain." (Exodus 3:11-12)

Moses asked God how he could be expected to lead and feed 600,000 people. God told him that the small amount of dough will last for thirty days. Moses continued to object by saying it was not safe to return to Pharaoh's palace because it was a den of robbers and murderers. God promised Moses that He would be with him.

Then Moses said to God, "Behold, I am going to the sons of Israel, and I will say to them, 'The God of your fathers has sent me to you.' Now they may say to me, 'What is His name?' What shall I say to them?" God said to Moses, "I AM WHO I AM"; and He said, "Thus you shall say to the sons of Israel, 'I AM has sent me to you.'" God, furthermore, said to Moses, "Thus you shall

⁸ M. Weissman, p. 35.

say to the sons of Israel, 'The LORD, the God of your fathers, the God of Abraham, the God of Isaac, and the God of Jacob, has sent me to you.' This is My name forever, and this is My memorial-name to all generations. (Exodus 3:13-15)

God told Moses, "Go gather the Elders of the Jews and tell them that I will take the Bnai Yisrael out of Egypt. When you mention to them the expression pakod pakadti they will hearken to your voice. They have a tradition from their forefather Yosaif that this expression will be used by the true redeemer." The verb pakod means "to redeem" or "to count" depending on the context. This expression denotes, "I shall punish the Egyptians for their past crimes as well as for their future misdeeds; I shall punish them in Egypt as well as at the Yam Suf."⁹

Then Moses said, "What if they will not believe me or listen to what I say? For they may say, 'The LORD has not appeared to you.'" (Exodus 4:1) "Why do you accuse them of disbelief?" Hashem rebuked Moshe. "I assure you that they will listen. They are ma'aminim bnai ma'aminim, believers, sons of Avraham about whom it is written 'and he believed in Hashem (Beraishis 15:6)."¹⁰

The LORD said to him, "What is that in your hand?" And he said, "A staff." Then He said, "Throw it on the ground." So he threw it on the ground, and it became a serpent; and Moses fled from it. But the LORD said to Moses, "Stretch out your hand and grasp it by its tail" — so he stretched out his hand and caught it, and it became a staff in his hand — "that they may believe that the LORD, the God of their fathers, the God of Abraham, the God of Isaac, and the God of Jacob, has appeared to you." (Exodus 4:2-5)

The sign of the staff's turning into a snake had a dual purpose. It was a punishment for Moshe's evil speech as well as a wonder to be performed by him in order to prove that he was the true redeemer.¹¹

⁹ Ibid, p. 38.

¹⁰ Ibid, p. 39.

¹¹ Ibid, p. 40.

The LORD furthermore said to him, "Now put your hand into your bosom." So he put his hand into his bosom, and when he took it out, behold, his hand was leprous like snow. Then He said, "Put your hand into your bosom again." So he put his hand into his bosom again, and when he took it out of his bosom, behold, it was restored like the rest of his flesh. (Exodus 4:6-7)

"I will give you yet a third sign," said Hashem. "You will then be able to present all three to prove that the G-d of their three forefathers Avraham, Yitzchak, and Yaakov appeared to you. If you take water from the river and pour it onto dry land, it will become blood."¹²

Moses continued to object.

Then Moses said to the LORD, "Please, Lord, I have never been eloquent, neither recently nor in time past, nor since You have spoken to Your servant; for I am slow of speech and slow of tongue." The LORD said to him, "Who has made man's mouth? Or who makes him mute or deaf, or seeing or blind? Is it not I, the LORD? "Now then go, and I, even I, will be with your mouth, and teach you what you are to say." (Exodus 4:10-12)

God attempted to persuade Moses to accept the role as leader of the Israelites, but he continued to rebuke God for six days. God was angry at Moses' continued resistance, and said, "You are only spared in the merit of your father Amram and because I am a merciful G-d!" God had wanted Moses to become a priest and his brother Aaron a Levite. However, Moses' continued refusal to accept the leadership of the Jewish people caused him to forfeit the priesthood. Instead, Aaron was appointed high priest and Moses became a Levite.¹³

Then the anger of the LORD burned against Moses, and He said, "Is there not your brother Aaron the Levite? I know that he speaks fluently. And moreover, behold, he is coming out to meet you; when he sees you, he will be glad in his heart. "You are to speak to him and put the words in his

mouth; and I, even I, will be with your mouth and his mouth, and I will teach you what you are to do. "Moreover, he shall speak for you to the people; and he will be as a mouth for you and you will be as God to him. (Exodus 4:14-17)

Plagues

The First Plague

God told Moses to go to the Nile and warn Pharaoh that unless he allowed the Israelites to go, he would bring a devastating plague on Pharaoh and his people. God's strategy was for Moses to give Pharaoh an explicit warning. If Pharaoh repented, then the plague would be unnecessary.¹⁴

Then the LORD said to Moses, "Pharaoh's heart is stubborn; he refuses to let the people go. "Go to Pharaoh in the morning as he is going out to the water, and station yourself to meet him on the bank of the Nile; and you shall take in your hand the staff that was turned into a serpent. "You shall say to him, 'The LORD, the God of the Hebrews, sent me to you, saying, "Let My people go, that they may serve Me in the wilderness. But behold, you have not listened until now." 'Thus says the LORD, "By this you shall know that I am the LORD: behold, I will strike the water that is in the Nile with the staff that is in my hand, and it will be turned to blood (Exodus 7:14-17).

One morning the Egyptians awoke to find the Nile gleaming with an unusual red color that looked, tasted, and smelled like blood. The fish in the Nile died, and the river stank. The Egyptians worshipped the Nile. God turned the Nile to blood to remind the Egyptians of the innocent Jews they had killed. The Egyptians searched for different sources of water, but whatever they touched — even the water used by the Jews in Goshen — was converted to blood.¹⁵

Humphreys suggests that the first plague was caused by toxic red algae that "bloomed" due to a combination of hot weather and the nutrient-rich

¹² Ibid, p. 40.

¹³ Ibid, p. 41-2.

¹⁴ Ibid, p. 58, 60.

¹⁵ Ibid, p. 61-2.

water brought down from the Nile River. The toxins killed the fish, and the dead fish caused the river to stink. The blood red color was due to a combination of red soil particles and red pigment from the algae bloom.¹⁶ The author of Exodus says, "Seven days passed after the Lord struck the Nile (Exodus 8:1). "Studies in the U.S. have shown that typically it takes days or sometimes weeks."¹⁷

The first plague did not harm Pharaoh because he had raised Moses in his house; God hoped he would repent, and his current exaltation would cause his subsequent downfall to be more dramatic.¹⁸

The Second Plague

Then the LORD said to Moses, "Go to Pharaoh and say to him, 'Thus says the LORD, "Let My people go, that they may serve Me. "But if you refuse to let them go, behold, I will smite your whole territory with frogs. "The Nile will swarm with frogs, which will come up and go into your house and into your bedroom and on your bed, and into the houses of your servants and on your people, and into your ovens and into your kneading bowls. "So the frogs will come up on you and your people and all your servants (Exodus 8:1-4)."

Therefore, Aaron stretched out his hand over Egypt's waters and the frogs came up and covered the Egypt's land. In addition, Pharaoh's magicians did likewise (Exodus 8:6-7).

Humphreys says that the decaying fish polluted the waters of the Nile forcing the frogs ashore. Once on land, they traveled toward sources of light and heat in search of the insects upon which they feed. The Hebrew word for "frogs" includes both frogs and toads. This is consistent with the Old Testament account. "According to the commentary on the book of Exodus by Houtman, the Nile normally teemed with frogs in September-October, and as we have stated earlier, the rise of the Nile reached its maximum in September, which was the most

¹⁶ C. Humphreys, The Miracles of Exodus, p. 118.

¹⁷ *Ibid*, p. 118.

¹⁸ M. Weissman, *op. cit.*, p. 63.

probable time for harmful algae to produce toxic blooms."¹⁹

One of the benefits of this plague is that it solved territorial disputes between Egypt and her neighbors. Wherever the frogs appeared was Egyptian territory. The dead frogs were in piles all over Egypt. Each Egyptian had to collect at least four piles of frogs.²⁰

The Third Plague

Because Pharaoh ignored the previous warnings, God did not warn him about the next plague.²¹ God commanded Moshe, "Tell Aharon to stretch out his staff and smite the dust of Egypt so that it may become lice!"²² The Hebrew word for "lice" could refer to flying insects such as mosquitoes, gnats, ticks, mites, midges, and so forth."²³

The New American Standard Bible substitutes "gnats" for "lice." Then the LORD said to Moses, "Say to Aaron, 'Stretch out your staff and strike the dust of the earth, that it may become gnats through all the land of Egypt.'" They did so; and Aaron stretched out his hand with his staff, and struck the dust of the earth, and there were gnats on man and beast. All the dust of the earth became gnats through all the land of Egypt (Exodus 8:16-17).

Houtman's commentary on Exodus states that dense swarms of gnats occur in Egypt in October and November, but he does not define the biological species meant by "gnats. Humphreys opines that the gnats were *Culicoides* midges.²⁴

Pharaoh's magicians were able to convert a staff into a snake, turn water into blood, and produce frogs; however, they were not able to create lice. They said, "Magic has no power over an object smaller than a barley corn. We are forced to admit that this plague results from the Finger of God."²⁵

¹⁹ C. Humphreys, *op. cit.*, p. 119.

²⁰ M. Weissman, *op. cit.*, p. 65, 67.

²¹ *Ibid*, p. 68.

²² *Ibid*, p. 68.

²³ C. Humphreys, *op. cit.*, p. 122.

²⁴ *Ibid*, p. 122.

²⁵ M. Weissman, *op. cit.*, p. 68-9.

The Fourth Plague

The Midrash Says reflects the oral tradition of what was omitted from the Torah. The following is the scripture as taken from The Midrash Says.

"If you do not let My people go, I will send a mixture of wild beasts, serpents, and scorpions upon your land. They will fill the houses of Egypt and also the land. I will distinguish the land of Goshen where My people dwell by not permitting the beasts to enter it. You will then clearly realize that although My shechina resides in Heaven, I AM HASHEM WHO EXERCISES HIS PROVIDENCE IN THE MIDST OF THE LAND!"²⁶

Compare the foregoing with the following as recorded in the New American Standard Bible.

Thus says the LORD, "Let My people go, that they may serve Me. "For if you do not let My people go, behold, I will send swarms of flies on you and on your servants and on your people and into your houses; and the houses of the Egyptians will be full of swarms of flies, and also the ground on which they dwell. "But on that day I will set apart the land of Goshen, where My people are living, so that no swarms of flies will be there, in order that you may know that I, the LORD, am in the midst of the land. "I will put a division between My people and your people. Tomorrow this sign will occur. (Exodus 8:20b-23)"

Pharaoh did not heed God's warning. The Midrash Says gives the following information.

"The Wild Beasts flocked therefore into Egypt. They consisted of many different kinds, such as lions, bears, snakes, scorpions, mice, weasels, birds of prey, insects and so on. The beasts roared and trampled on everything and bit people; the flies and mosquitos (sic) swarmed into their eyes and ears. The beast first invaded

Pharaoh's palace and only then all the other Egyptian houses."²⁷

Here is how the New American Standard Bible records this incident. "Then the Lord did so. And there came great swarms of insect into the house of Pharaoh and the houses of his servants and the land was laid waste because of the swarms of insects in all the land of Egypt (Exodus 8:24)."

Swarms of gnats and flies followed the mass death of fish and piles of rotting bodies of frogs and toads. The gnats and flies were free to breed rapidly because their natural predators, the frogs and toads, had suffered a mass population collapse."²⁸

Humphreys proposes that the fly involved in this plague is the stable fly, *Stomoxys calcitrans*. He rules out the housefly because swarms of houseflies are not unpleasant. He eliminates blackflies because they do not breed very rapidly and they do not swarm. He omits horseflies because they also do not breed very rapidly. He rules out tsetse flies because they live primarily in the tropical rainforest, and not in the desert.²⁹

Humphreys briefly describes the life cycle of the stable fly. "The stable fly has a painful bite that punctures the skin and leaves behind an open wound, exposing the victim to infection. Stable flies also swarm and can breed very rapidly, with a female laying up to five hundred eggs at a time. The stable fly therefore admirably fits the description of the plague of flies given in the book of Exodus."³⁰

The Fifth Plague

Then the LORD said to Moses, "Go to Pharaoh and speak to him, "Thus says the LORD, the God of the Hebrews, "Let My people go, that they may serve Me. "For if you refuse to let them go and continue to hold them, behold, the hand of the LORD will come with a very severe pestilence on your livestock which are in the field, on the horses, on the donkeys, on the camels, on the herds, and on the flocks. "But the LORD will make a distinction between the livestock of Israel and the livestock of Egypt, so that

²⁷ M. Weissman, op. cit., p. 70.

²⁸ C. Humphreys, op. cit., p. 122.

²⁹ Ibid, p. 122-3.

³⁰ Ibid, p. 123.

²⁶ Ibid, p. 69.

nothing will die of all that belongs to the sons of Israel." The LORD set a definite time, saying, "Tomorrow the LORD will do this thing in the land." So the LORD did this thing on the next day, and all the livestock of Egypt died; but of the livestock of the sons of Israel, not one died. (Exodus 9:1-6)

This disease killed several types of animals, but no humans. Humphreys suggests that bacterial infections would have resulted in substantial human deaths. He excludes Rift Valley fever because it does not affect horses, and horses are specifically mentioned as being affected. The disease only affected hooved animals, but not cats, dogs, or birds. He notes that the *Culicoides* midge is the main carrier of both African horse sickness and bluetongue, and both viruses cause death of animals in a few days. Humphreys suggest that the fifth plague of the death of livestock was due to African horse sickness and bluetongue spread by the *Culicoides* midges of the third plague.³¹

The Sixth Plague

Then the LORD said to Moses and Aaron, "Take for yourselves handfuls of soot from a kiln, and let Moses throw it toward the sky in the sight of Pharaoh. "It will become fine dust over all the land of Egypt, and will become boils breaking out with sores on man and beast through all the land of Egypt." So they took soot from a kiln, and stood before Pharaoh; and Moses threw it toward the sky, and it became boils breaking out with sores on man and beast. (Exodus 9:8-10) The author of Deuteronomy continues by saying, The Lord will strike you on the knees and legs with sore boils, from which you cannot be healed, from the sole of your foot to the crown of your head (Deuteronomy 28:35).

This plague affected both animals and humans. "Marr and Malloy have analyzed these and suggest that the most likely possibility is a bacterium called *Pseudomonas mallei*, which exists throughout Africa and the Middle East and is popularly known as glanders."³² Glanders affects both animals and humans and is a highly contagious infection that is

³¹ C. Humphreys, op. cit., p. 125.

³² Ibid, p. 125.

spread by fly bites.³³ However, Humphreys disagrees and believes that this plague was caused by the stable fly of the fourth plague. The stable fly prefers to bite its victims on the legs and feet. This is consistent with the details given in the Old Testament.³⁴

The Seventh Plague

Moses stretched out his staff toward the sky, and the LORD sent thunder and hail, and fire ran down to the earth. And the LORD rained hail on the land of Egypt. So there was hail, and fire flashing continually in the midst of the hail, very severe, such as had not been in all the land of Egypt since it became a nation. The hail struck all that was in the field through all the land of Egypt, both man and beast; the hail also struck every plant of the field and shattered every tree of the field. Only in the land of Goshen, where the sons of Israel were, there was no hail. (Exodus 9:23-26)

The author of Exodus continues, "(Now the flax and the barley were ruined, for the barley was in the ear and the flax was in bud. But the wheat and the spelt were not ruined, for they ripen late.) (Exodus 9:31-32)"

"This plague began as a mere rain because Hashem hoped that the Egyptians would still do teshuva. Eventually the rain was converted into a storm. Thunder crashed, lightning struck, and the earth quaked. Then huge hailstones rained down from Heaven, composed of blocks of ice and of fire, but the fire did not consume the ice, nor did the ice extinguish the fire."³⁵

The unification of fire and water amazed Pharaoh. He sent for Moses and Aaron, told them that he had sinned this time, caused innocent blood to be spilled, asked God to end the plague, and he would let the Israelites go.³⁶

³³ Ibid, p. 126.

³⁴ Ibid, p. 126.

³⁵ M. Weissman, op. cit., p. 76.

³⁶ Ibid, p. 77-8.

“The diameter of hailstones can exceed 5 inches, and these solid pieces of ice from the sky can kill both animals and humans.”³⁷ Hoffmeier notes in his book *Israel in Egypt* that paintings from the Egyptian tomb of Pahari at el-Kab from the mid-Eighteenth Dynasty (about 1400 B.C.) depict the harvesting of barley and the pulling of flax at the same time.³⁸ Humphreys notes that these details indicate the hail occurred in February-March.³⁹

The Eighth Plague

Moses and Aaron went to Pharaoh and said to him, "Thus says the LORD, the God of the Hebrews, 'How long will you refuse to humble yourself before Me? Let My people go, that they may serve Me. 'For if you refuse to let My people go, behold, tomorrow I will bring locusts into your territory. The author of Exodus continues, "So Moses stretched out his staff over the land of Egypt, and the LORD directed an east wind on the land all that day and all that night; and when it was morning, the east wind brought the locusts. The locusts came up over all the land of Egypt and settled in all the territory of Egypt; they were very numerous. There had never been so many locusts, nor would there be so many again. For they covered the surface of the whole land, so that the land was darkened; and they ate every plant of the land and all the fruit of the trees that the hail had left. Thus nothing green was left on tree or plant of the field through all the land of Egypt. Then Pharaoh hurriedly called for Moses and Aaron, and he said, "I have sinned against the LORD your God and against you." (Exodus 10:3-4, 13-15)

When the hail of the seventh plague stopped falling, the ground would be very wet. This would have been ideal substrate for locusts on which to lay their eggs. Plagues of locusts occur only when conditions are favorable. Note that Moses and Aaron state that they will bring locusts into the country tomorrow.

³⁷ C. Humphreys, op. cit., p. 130.

³⁸ Ibid, p. 131.

³⁹ Ibid, p. 131.

Here is a brief description of the life cycle of the desert locust. The female locust digs into the soil with her abdomen to lay her eggs, about four inches below the soil surface, and for the eggs to hatch the soil must be damp to at least this depth. The eggs hatch to produce hoppers, which do not fly but travel by marching. The hoppers turn into pink immature adults, which have wings, can fly long distances with the wind, and feed voraciously when they land. Immature adult locusts eat about 2 grams of fresh food every day, or about the same as their weight. A ton of locusts is a very small part of an average swarm, and will eat the same amount of food as 2500 people. The immature adults turn into yellow mature adults, which copulate and lay eggs.⁴⁰

The Ninth Plague

“Then the LORD said to Moses, "Stretch out your hand toward the sky, that there may be darkness over the land of Egypt, even a darkness which may be felt." So Moses stretched out his hand toward the sky, and there was thick darkness in all the land of Egypt for three days. They did not see one another, nor did anyone rise from his place for three days, but all the sons of Israel had light in their dwellings.” (Exodus 10:21-23)

Sandstorms are common in Egypt in the spring. A sandstorm is called a khamsin, and they can last up to two or three days. The first khamsin normally occurs in March, and usually produces a very dense and dark dust cloud because of the red earth deposited after the retreat of the flooded Nile. Humphreys suggests that the heavy flooding of the Nile the previously September led to the ninth plague. It also agrees with the author of Exodus because a sandstorm may be ‘felt’.⁴¹

The Tenth Plague

God instructed Moses to warn Pharaoh about the last plague.

“About midnight I will go out in the midst of Egypt and I will smite every Egyptian first-born, from the crown prince destined to become Pharaoh’s successor down to the

⁴⁰ C. Humphreys, op. cit., p. 133-4.

⁴¹ Ibid, p. 135-6.

lowliest of the Egyptians, the first-born of the maid behind the millstones, and even the first-born of the animals. The resulting screaming and weeping will be more intense than anything that was ever heard before or anything that will ever be heard in the future."⁴²

God continued, "But against any of the sons of Israel a dog will not even bark, whether against man or beast, that you may understand how the LORD makes a distinction between Egypt and Israel." (Exodus 11:4-7)

Pharaoh noted that this plague did not sound too bad because there were only several hundred first-born. However, Pharaoh had forgotten that some Egyptian women had several husbands and some Egyptian men had several wives, and each of these people had several first-born sons.⁴³

Now it came about at midnight that the LORD struck all the firstborn in the land of Egypt, from the firstborn of Pharaoh who sat on his throne to the firstborn of the captive who was in the dungeon, and all the firstborn of cattle. Pharaoh arose in the night, he and all his servants and all the Egyptians, and there was a great cry in Egypt, for there was no home where there was not someone dead. Then he called for Moses and Aaron at night and said, "Rise up, get out from among my people, both you and the sons of Israel; and go, worship the LORD, as you have said. "Take both your flocks and your herds, as you have said, and go, and bless me also." (Exodus 12:29-32)

Humphrey proposes the following hypothesis to explain the death of the firstborn males. The firstborn sons in many ancient societies were special. They ate first and often received larger portions. The eighth plague of locusts not only consumed most of the remaining crops, but they also deposited feces on the ground. The Egyptians were desperate to save as much of the barley and flax as possible and took the damp, contaminated harvest to their granary stores.

⁴² M. Weissman, op. cit., p. 89.

⁴³ Ibid, p. 89.

They prepared meals from the contaminated harvest for their first-born sons.⁴⁴

John Marr and Curtis Malloy, authors of the paper "An Epidemiologic Analysis of the Ten Plagues of Egypt," suggest that fungi growing on the crops produced a mycotoxin. Mycotoxins are poisons that can be deadly. They also conclude that the mycotoxin, macrocyclic tricothecenes, was responsible for the deaths of humans and animals in the tenth plague. This mycotoxin causes massive internal bleeding that leads to rapid and sudden death.⁴⁵

The following table summarizes the plagues as described by Weissman and Humphreys:

Weissman writes that after Egypt suffered through the ten plagues, Pharaoh fell down before Moses, imploring him, "I beg of you, leave the country immediately and take everyone with you! I will give you as many of my animals and servants as you wish."⁴⁶ The Egyptians also encouraged the Hebrews to leave in a hurry. So they took their dough before it was leavened, and placed their kneading bowls and clothes on their shoulders." (Exodus 12:33-34)

Time of Year

"They journeyed from Rameses in the first month, on the fifteenth day of the first month; on the next day after the Passover the sons of Israel started out boldly in the sight of all the Egyptians, while the Egyptians were burying all their firstborn whom the LORD had struck down among them." (Numbers 33:3-4) The fifteenth day of the first month of the Jewish lunar calendar corresponds to late March or early April in our solar calendar. It was later called the month of Nisan. Humphreys says it is an ideal time for walking in the desert because it is pleasantly warm, but not too hot.⁴⁷

The number of Jewish men between twenty and sixty years old who left Egypt on this day was 599,999. God included Himself to make the count exactly 600,000.⁴⁸ Weissman says that the men were

⁴⁴ C. Humphreys, op. cit., p. 138-9.

⁴⁵ Ibid, p. 138-9.

⁴⁶ M. Weissman, op. cit., p. 104-5.

⁴⁷ C. Humphreys, op. cit., p. 154.

⁴⁸ M. Weissman, op. cit., p. 111.

led by Moses and Aaron, while the women were led by Moses' sister, Miriam.⁴⁹

We will now consider the route the Hebrews took when they left Goshen and traveled to Mt. Sinai.

Rameses

The Midrash Says states that all of Jacob's descendants lived in Goshen.⁵⁰ Chapter 47 of the Book of Genesis appears to indicate that Rameses and Goshen are the same community or that

The Plagues of Egypt					
Number	Plague ¹	Plague ¹	Tactics of God ¹	Cause ¹	Time of Year ¹
1	Blood	Nile turned to blood and fish died	Cut off water supply	Red soil particles plus red harmful algal blooms	September
2	Frogs	Frogs / Toads	Frighten enemy by loud noises	Polluted Nile forces frogs ashore. Mass death due to starvation and dehydration	September – October
3	Lice	Gnats	Attack by arrows	The biting midge <i>Culicoides carnithorix</i> . Free to breed rapidly due to population collapse of frogs.	October – November
4	Wild Beasts	Flies	Have foreign allies join attack	The stable fly <i>Stomoxys calcitrans</i> . Free to breed rapidly due to population collapse of frogs.	November
5	Pestilence	Death of livestock	Kill enemy's animals	Bluetongue virus and African horse sickness virus, both spread by the biting midge, <i>Culicoides</i> .	November - December
6	Boils	Boils	Destroy enemy's army	Skin infection spread by the stable fly, <i>Stomoxys</i> .	December - January
7	Hailstones	Hail	Hurl missiles to destroy city walls	Exceptionally severe hailstorm.	February – March
8	Locusts	Locusts	Assemble army to conquer city	The desert locust, attracted by damp sand from hailstorm to settle and lay eggs	February – March
9	Darkness	Darkness for three days	Take enemies captive and imprison them	First <i>khamsin</i> of the year produces particularly dark and dense dust storm.	March
10	Slaying of the First-born	Death of the firstborn males	Execute leaders and generals of enemy camp	Mycotoxins on grain, possibly <i>macrocylic tricothecenes</i> . Due to damp grain from hail contaminated by locusts' feces and stored in a grain store then sealed by sand from the <i>khamsin</i> dust storm	Late March – early April

⁴⁹ Ibid, p. 116.

⁵⁰ Ibid, p. 1.

Rameses is a subdivision of Goshen. Wyatt says that Rameses was the Delta region because a city was not large enough for two million people and their flocks and herds.⁵¹

Ancient Rameses is modern Qantir.⁵² “At Qantir, near the town of Fakus, we can find the archaeological remains of the foundations of a royal palace and inscriptions that actually say on them “Pi-Ramesses.” The prefix “Pi” is Egyptian and roughly translated means “city of” or “dwelling of”.⁵³

Succoth

Six hundred thousand men traveled on foot Rameses to Succoth, aside from children.” (Exodus 12:37) “Modern scholars are virtually unanimous that Succoth was a region on the eastern frontier of ancient Egypt near the border between Egypt and the Sinai Peninsula, around Tell el-Maskhuta, close to modern Ismailiya.”⁵⁴ Wyatt mentions that Succoth is a place called “Tharu” or “T’aru” or “Takut.” This place contained a line of fortifications with small towers to keep back the Bedouins of the Delta.⁵⁵ Tharu was located near the Delta where the Israelites were living. It is the location from where the Egyptian army prepared and assembled for their military expeditions to the north.⁵⁶

The distance from Rameses to Succoth is twenty-five miles, the distance of a typical day’s journey.⁵⁷ A day’s journey is based on walking about three miles per hour for eight hours.⁵⁸

The speed of travel is governed by motivation of the group and forces acting on that group. The Egyptians had suffered through ten terrible plagues and were anxious for the Israelites to leave Egypt as soon as possible. Yet, Moses knew that Pharaoh had earlier agreed several times to let the Israelites leave Egypt, but kept changing his mind. So, he was concerned that they travel as rapidly as possible to

⁵¹ R. Wyatt, “The Exodus: The route of the Exodus Journeys”, p. 2.

⁵² C. Humphreys, *op. cit.*, p. 29.

⁵³ J. Long, *op. cit.*, p. 119.

⁵⁴ C. Humphreys, *op. cit.*, p. 156.

⁵⁵ R. Wyatt, *op. cit.*, p. 2.

⁵⁶ *Ibid*, p. 3.

⁵⁷ C. Humphreys, *op. cit.*, p. 157.

⁵⁸ *Ibid*, p. 158.

get the Israelites out of Egyptian-controlled territory. The Old Testament records that they traveled by both day and night. (Exodus 13:21)

Pillar of Cloud, Pillar of Fire

God provided shelter, protection, bread and water for the Israelites by seven Clouds of Glory. The Cloud above provided protection from the hot sun. The Cloud below killed snakes and scorpions. Four Clouds provided shelter in all directions. The seventh Cloud preceded the group and led them during the day. It was replaced by a pillar of fire at night.⁵⁹

The New American Study Bible gives this account: “The LORD was going before them in a pillar of cloud by day to lead them on the way, and in a pillar of fire by night to give them light, that they might travel by day and by night. He did not take away the pillar of cloud by day, nor the pillar of fire by night, from before the people.” (Exodus 13:21-22)

Rubenstein writes that the clouds of glory provided protection, presence, and love. Protection included killing animals such as scorpions and snakes that might harm them. They also sheltered them from the hot sun above and the hot sand on their feet. The clouds also intercepted the arrows and stones the Egyptians threw when Pharaoh trapped them by the Red Sea. When the Israelites complained about their thirst or turning back toward Egypt, the clouds protected Moses and Aaron from stones thrown at them by the Israelites. The presence of the clouds symbolized the continual presence of God among the Israelites. By protecting the Israelites from danger similar to that of a spouse caring for a mate or a parent caring for a child, the clouds also represented love.⁶⁰

Humphreys suggests that pillars of cloud and fire describe a volcanic eruption, and shares part of a letter written by Pliny the Younger to the Roman Historian Tacitus in A.D. 104 as he observed the eruption of Vesuvius in A.D. 79.

On the 24th August, about one in the afternoon, my mother desired him to

⁵⁹ M. Weissman, *op. cit.*, p. 118.

⁶⁰ J. Rubenstein, “The Symbolism of the Sukkah.”

observe a cloud of very unusual size and appearance. . . . It was not at that distance discernible from what mountain this cloud issued, but it was found afterwards to be Vesuvius. I cannot give you a more exact description of its figure than by resembling it to that of a pine-tree, for it shot up a great height in the form of a trunk. . . .”⁶¹

In the same letter, after moving closer to Mount Vesuvius and it is now dark, Pliny the Younger continues, “Mount Vesuvius was blazing in several places with spreading and towering flames whose refulgent brightness the darkness of the night set in high relief.”⁶²

Humphreys believes the ancient mountain described by the Old Testament authors is a volcano. He devotes additional pages documenting the evidence.⁶³ *Volcanoes of the World*, edited by T. Simkin and others contains a comprehensive body of information about volcanoes that have been active in the past ten thousand years. Three volcanoes are in the area of Saudi Arabia where scholars think the mountain from which Moses received the Ten Commandments is located.⁶⁴

Shur / Etham

“Then they set out from Succoth and camped in Etham on the edge of the wilderness.” (Exodus 13:20) Etham refers to the land surrounding the Gulf of Aqaba. The Israelites entered Etham when they left Succoth, and they remained in Etham after crossing the Red Sea. “Then Moses led Israel from the Red Sea, and they went out into the wilderness of Shur; and they went three days in the wilderness and found no water.” (Exodus 15:22)

Möller suggests that Etham is now Edom. ‘Edom’ means ‘red’, and could explain the name “Red Sea”. The red and pink rocks that surround the Gulf of Aqaba become bright red in the light of the setting sun.⁶⁵

⁶¹ C. Humphreys, *op. cit.*, p. 165-6.

⁶² *Ibid*, p. 166-7.

⁶³ *Ibid*, p. 82-93, 168-171.

⁶⁴ *Ibid*, p. 317.

⁶⁵ L. Möller, *The Exodus Case: New Discoveries Confirm the Historical Exodus*, p. 171.

Humphreys compares the first ten places on the Exodus route as stated in Exodus 12:37-15:27 and Numbers 33:3-9. The places are identical except for the Desert of Shur and the Desert of Etham. He suggests that the Desert of Shur and the Desert of Etham are different names for the same place. “Shur” is a Hebrew word meaning “wall.”⁶⁶ Humphreys believes that the wall mentioned refers to the rift valley and walls that form the Great Rift Valley, a huge, four-thousand-mile fissure in the earth’s crust beginning in Syria and Lebanon and ending in Mozambique. This places the location of Shur/Etham in the region of land surrounding the head of the Gulf of Aqaba.⁶⁷

The Gulf of Aqaba is part of a long cleft that extends from present day Israel to Africa. The cleft is formed because two continental plates meet, each moving in their own direction. The Gulf of Aqaba goes down 1900 meters and is surrounded by mountains 2500 meters high.⁶⁸ East of the Gulf of Aqaba is an extensive desert that includes most of present Saudi Arabia and parts of Jordan.⁶⁹

Wilderness refers to the mountainous land of the mid and southern Sinai Peninsula. It was used by both caravans and the army. This route was safer because it avoided contact with the Philistines living along the coast.⁷⁰

Wyatt states that guards in the watchtowers flashed messages by reflecting sunlight by day and fire by night. He suggests that these guards likely alerted Pharaoh to the exact progress of the Israelites as they left Egypt.⁷¹

Today, part of this wilderness is called “Sirhan” in Arabic. Möller suggests that this name may be related to the 3500 year old name “Shur”.⁷²

⁶⁶ C. Humphreys, *op. cit.*, p. 209-211.

⁶⁷ *Ibid*, p. 216-218.

⁶⁸ L. Möller, *op. cit.*, p. 188.

⁶⁹ *Ibid*, p. 234.

⁷⁰ B. Fry, “Newsletter Two: The Exodus Route”, part 2a, p. 3.

⁷¹ B. Fry, “Newsletter Two: The Exodus Route”, part 2b, p. 1.

⁷² L. Möller, *op. cit.*, p. 234-6.

Pi-hahiroth, Migdol, Baal-Zephon

Now the LORD spoke to Moses, saying, "Tell the sons of Israel to turn back and camp before Pi-hahiroth, between Migdol and the sea; you shall camp in front of Baal-zephon, opposite it, by the sea." (Exodus 14:1-2)

The Midrash Says tells us that God "wanted to mislead Pharaoh into thinking that the Jews had lost their way so that he and his army would pursue them and finally drown in the Red Sea." The command to backtrack towards Egypt was an ordeal for the Children of Israel. However, Moses assured them that they would remain free. They backtracked until they reached Pi Hachiros, so named because this is the place bordering the sea where the Egyptians drowned and in the vicinity of Baalzephon.⁷³

The origin of Pi-Hahiroth could be either Hebrew or Egyptian. If Hebrew, it would signify "the caves' mouth" and if Egyptian, it would signify "a grassy place."⁷⁴

The people of Israel were to pitch camp between Migdol and the sea. Migdol is Hebrew and means tower. It may refer to a watch tower on one of the mountains, or at the mouth of the valley near the encampment on the coast.⁷⁵

Wyatt suggests that Migdol could refer to either a mountain range or a watchtower. The mountain range could be the area of mountains and wadis separating the Sinai Desert and the Gulf of Aqaba. Egyptians had posts throughout the Sinai Peninsula, and one of the mountains may have had a watchtower on it to maintain watch on ships in the Gulf of Aqaba.⁷⁶

Baalzephon is opposite the place of encampment on the opposite, eastern shore of the Gulf of Aqaba. Baalzephon is Hebrew and means "lord of the north".⁷⁷ Baal Zephon literally means "God of the north," and is the name of a Canaanite god

associated with storms. Violent storms are common on the Gulf of Aqaba.⁷⁸

Wyatt says there is a fortress on the opposite (Saudi Arabian) side from Nuweiba. He suggests that this fortress was dedicated to Baal and was Baalzephon.⁷⁹

"Zephon was one of the sons of Esau's son Eliphaz, who was a tribal prince in Edom. Edom is an area described as lying between the Dead Sea and the Gulf of Aqaba, and also further down along the coastal area of the Gulf of Aqaba. Edom, which means red, may comprise the same area as Etham, i.e., the coastal area of the Gulf of Aqaba. Baal-Zephon would then indicate a cult site for the god Baal in the area of Zephon (Baalzephon). If this is the case, then this place could have been on the north-east coast of the Gulf of Aqaba, opposite the suggested place of encampment of the people of Israel."⁸⁰

Trapped by Pharaoh

The Lord hardened the heart of Pharaoh, and he changed his mind about letting the Israelites go. He took his officers and six hundred chariots of Egypt as they chased after the Hebrews. (Exodus 14:6-8)

While the Egyptians were united in their desire to overtake the Children of Israel, their views varied on how to deal with them. Some planned to rob them, others wanted to murder them, while another group wanted to murder and rob them. However, Pharaoh noted that in the past he ordered only the Jewish baby boys killed, but he would now annihilate the entire people.⁸¹

"Pharaoh's army traveled fast. It only took them one day to cover the distance which the Bnai Yisrael had traveled in three days and Pharaoh's spies in a day and half. "The Egyptian chariot fleet arrived at Pi Hahiroth on the 6th day of Passover."⁸²

The Bible says, "As Pharaoh drew near, the sons of Israel looked, and behold, the Egyptians were

⁷³ M. Weissman, op. cit., p. 119-120.

⁷⁴ L. Möller, op. cit., p. 177.

⁷⁵ Ibid, p. 177.

⁷⁶ B. Fry, part 2b, op. cit., p. 1.

⁷⁷ L. Möller, op. cit., p. 177.

⁷⁸ C. Humphreys, op. cit., p. 241.

⁷⁹ B. Fry, part 2b, op. cit., p. 1-2.

⁸⁰ L. Möller, op. cit., p. 177-8.

⁸¹ M. Weissman, op. cit., p. 122.

⁸² J. Long, op. cit., p. 103.

marching after them, and they became very frightened; so the sons of Israel cried out to the LORD. Then they said to Moses, "Is it because there were no graves in Egypt that you have taken us away to die in the wilderness? Why have you dealt with us in this way, bringing us out of Egypt?" Moses is confident of the Lord's guidance and responds, "The LORD will fight for you while you keep silent." (Exodus 14:10-11, 14)

Möller suggests that this description fits the locality of Nuweiba. Pharaoh must have felt confident that they would be victorious in destroying the Hebrews. When they emerged on the plain of Nuweiba, the Israelites were trapped with mountains on two sides, the Gulf of Aqaba on a third, and the Egyptian army on the fourth side.⁸³

Wyatt describes the beach of Nuweiba as having the remains of an ancient Egyptian fortress at the north end of the beach area.⁸⁴

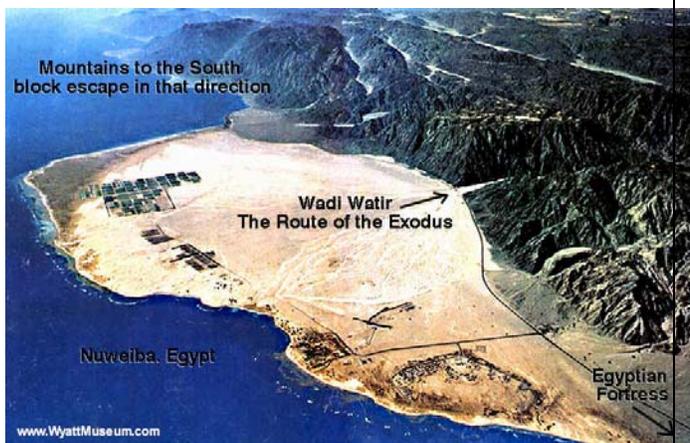


Figure 1. Nuweiba. Source:
<http://www.wyattmuseum.com/images/wpeB6.jpg>

Crossed Red Sea

Moses and the Israelites prayed to God to give them an avenue of escape. God told them to travel into the ocean and he would perform miracles for them. He would split the sea because they demonstrated their belief in God when they agreed to travel toward Egypt without questioning Him.⁸⁵

⁸³ L. Möller, op. cit., p. 183-184.

⁸⁴ B. Fry, part 2b, op. cit., p. 1.

⁸⁵ M. Weissman, op. cit., p. 125.

The Children of Israel began to advance into the waters of the sea before the sea split. God commanded that Moses raise his rod and threaten the sea. When the Divine presence of God appeared to the sea, it split. The roar of the splitting waters was heard even in distant countries.⁸⁶

The Nuweiba peninsula is very flat and extends 3.5 km into the Gulf of Aqaba. It is so big that it is easily seen on maps and from satellites. A similar, but smaller peninsula is on the Saudi Arabian side.⁸⁷ These flat areas suggest the possibility of an underwater land bridge, and Möller discusses the geophysical area.⁸⁸

A remote controlled underwater camera was used to study the underwater bridge. It had "the following characteristics:

- Very limited vegetation
- No corals
- No pieces of rock
- No mountainous formations
- No steep slopes
- No organic sediments (like mud)
- Extremely flat
- Very broad (at least 2 km)
- The sea-bed is covered by sand and gravel

This means that if the water is removed and the sand is dried, there is solid ground to walk on. Further, the calculated gradient (based on the deepest depth scenario) is close to what is accepted for disabled people. The gradient corresponds to a change of 22-150 metres per km (or 2-15 cm/linear meter) with the deepest depth scenario."⁸⁹

"Then Moses stretched out his hand over the sea; and the LORD swept the sea back by a strong east wind all night and turned the sea into dry land, so the waters were divided. The sons of Israel went through the midst of the sea on the dry land, and the waters were like a wall to them on their right hand and on their left." (Exodus 14:21-22)

⁸⁶ Ibid, p. 128.

⁸⁷ L. Möller, op. cit., p. 188.

⁸⁸ Ibid, p. 188-90.

⁸⁹ Ibid, p. 190-1.

“Classical Jewish Bible commentators ... teach that one of the reasons that God sent a strong east wind was so that the Egyptians would believe that they were simply witnessing a natural occurrence. They further comment that the Creator always minimizes miracles and alters the laws of nature only when it is of the great consequence.”⁹⁰

Wind set-down is a rare oceanographic phenomenon that requires specific geophysical and meteorological elements. The relatively shallow waters are literally parted thus creating a path on dry ground. Those same waters return with such a rapid and dangerous force that anything or anyone in the path is swept away.⁹¹ Humphreys suggest that this event allowed the Israelites to escape from the Egyptians.⁹²

Corals require something on which to fasten, and are found in many places in the Red Sea. Corals do not grow on sand, or similar substrates. Since there are now many corals growing at the suspected crossing site, they must have fastened themselves to objects now on the sea floor.⁹³

In addition to studying the locations where the Israelites were thought to have crossed the Red Sea, the underwater sea-bed has also been explored. Several objects have been identified on the underwater bridge.

The easiest structures to recognize are the wheels, and those found have 4, 6, or 8 spokes. In addition to corals attaching to remains of wooden wheels, a gilded wheel was found with four spokes. They all appear to date from part of the 18th dynasty.⁹⁴ Wyatt notes that numerous wheels were found.⁹⁵

There are many piles of skeletons and skeletal parts on the underwater bridge in the Gulf of Aqaba. They have been identified as humans, horses, and cattle. Some skeletal parts are petrified and are several

thousand years old. Dead corals cover most of the skeletal parts.⁹⁶

There is additional evidence of an early culture. A 4.7-meter cylindrical red granite column with a diameter of 90 centimeters is on the shore at Nuweiba. It is similar to columns found in Israel, and does not look Egyptian. The column was originally found lying at the edge of the water, and was raised near the place where it had fallen. The large column has an estimated weight of 11.5 tons. It must have meant a great deal to the person who made and erected the column because red granite is not found in the area and must have been transported from somewhere else.⁹⁷

Columns looking similar to the Nuweiba column may be found on the Mediterranean coast of present day Israel. The columns are alike in shape, height and diameter, material (granite), lack of decorations, and having a simple border high up on the pillar.⁹⁸

Wyatt found an identical column erected on the opposite shore. The Phoenician letters were intact on this column, and later translated to read Mizraim; Solomon; Edom; death; pharaoh; Moses; and Yahweh. Wyatt believes that King Solomon erected the two columns to commemorate the miracle of the crossing of the sea.⁹⁹ Möller notes that the column on the Saudi-Arabian side was removed by the Saudi-Arabian authorities and replaced by a metal flag and plate.¹⁰⁰

King Solomon was familiar with the waters of the Gulf of Aqaba, and had the equipment to transport these columns.¹⁰¹ He built a fleet of ships in Ezion-geber near Eloth on the shore of the Red Sea in Edom. (1 Kings 9:26)

“Elot was situated in the vicinity of today’s Eilat on the northern point of the Gulf of Aqaba, in present day Israel. Since King Solomon had his own fleet in the Gulf of Aqaba, and moreover was very rich and influential, it could not have been any great problem

⁹⁰ J. Long, *op. cit.*, p. 103-4.

⁹¹ *Ibid*, p. 104-5.

⁹² C. Humphreys, *op. cit.*, p. 244-260.

⁹³ L. Möller, p. 210-11.

⁹⁴ *Ibid*, p. 217.

⁹⁵ B. Fry, *Newsletter Three: April 1993*, p. 1.

⁹⁶ L. Möller, *op. cit.*, p. 229.

⁹⁷ *Ibid*, p. 205.

⁹⁸ *Ibid*, p. 206.

⁹⁹ B. Fry, *Newsletter Two: The Exodus Route*, *op. cit.*, p. 3.

¹⁰⁰ L. Möller, *op. cit.*, p. 206.

¹⁰¹ *Ibid*, p. 207.

to manufacture these columns, and transport them to the respective places by sea. The site of the crossing through the Red Sea (Nuweiba) is only roughly 70 km south of the northern point of the Gulf of Aqaba, Eilat of today.”¹⁰²

Marah

After crossing the Red Sea, the Israelites stopped at Marah. “When they came to Marah, they could not drink the waters of Marah, for they were bitter; therefore it was named Marah.” (Exodus 15:23) ‘Mar’ is Hebrew and means ‘bitter.’ In other languages, ‘mar’ and its variants mean ‘sea.’¹⁰³

Possibly, on rare occasions, the mineral salts washed down from nearby cliffs and made the water in Marah taste bitter. At those times the water would not quench the thirst of either humans or cattle.¹⁰⁴ Humphreys suggests that Marah may be ancient Maliha or Malha or a location where Moses found bitter water.¹⁰⁵

“Then he cried out to the LORD, and the LORD showed him a tree; and he threw it into the waters, and the waters became sweet.” (Exodus 15:25a) Some varieties of trees produce charcoal when burned. Charcoal removes salty and other bad-tasting molecules from water by adsorbing them onto the surfaces of all its tiny pores. This is why charcoal is used today in water filters.¹⁰⁶ Georg Wallin, in his book *Travels in Arabia* says that the wood of the *Acacia seyal* tree produces the best kind of charcoal for fuel.¹⁰⁷

A large piece of burned acacia wood covered with charcoal could therefore have sweetened the water rapidly and effectively.”¹⁰⁸

Elim

“Then they came to Elim where there were twelve springs of water and seventy date palms, and they camped there beside the waters.” (Exodus 15:27)

¹⁰² Ibid, p. 207.

¹⁰³ L. Möller, op. cit., p. 236.

¹⁰⁴ Ibid, p. 237.

¹⁰⁵ C. Humphreys, op. cit., p. 270-1.

¹⁰⁶ Ibid, p. 272.

¹⁰⁷ Ibid, p. 272.

¹⁰⁸ Ibid, p. 272.

Houtman’s commentary on Exodus states that elim is a Hebrew word meaning ‘big trees.’ Several sources describe Ainuna, thirty miles south of Madian, as an oasis with tall palm trees. Humphreys suggests that this location matches the description of Elim in the book of Exodus.¹⁰⁹ There are several hundred palm trees and 12 wells at this oasis today.¹¹⁰

Al-Bad is a small community with many palm trees and wells. Adventurers Larry Williams and Bob Cornuke visited this area and spoke with a native who spoke English. They were told that Moses stopped at this place on his way to Mount Sinai.¹¹¹

Desert of Sin

One month after their departure from Egypt on the fifteenth of Iyar they came to the wilderness of Sin which was between Elim and Sinai.¹¹² (Exodus 16:1)

The Hebrews baked matzos from the dough brought out of Egypt which lasted thirty-one days. When the dough was gone, the people complained to Moses that they were now facing possible starvation. They reminded Moses that even though they were forced to hunt and cook for the Egyptians, they did not eat the meat. God was angered by the request for meat because they had brought cattle out of Egypt. Moses told the people that God would grant their request for bread because it is a basic necessity, and he would also provide them with meat, but only in the evening so they would not have much preparation time.¹¹³

The wilderness of Sin may be the narrow plain el-Markha that stretches along the eastern shore of the Red Sea toward the promontory of Ras Mohammed at the southern extremity of the Sinitic Peninsula.¹¹⁴

“So it came about at evening that the quails came up and covered the camp, and in the morning there was a layer of dew around the camp.” (Exodus 16:13-14)

¹⁰⁹ Ibid, p. 275-7.

¹¹⁰ L. Möller, op. cit., p. 237.

¹¹¹ L. Williams, The Mountain of Moses: The Discovery of Mount Sinai, p. 180.

¹¹² M. Weissman, op. cit., p. 149.

¹¹³ M. Weissman, op. cit., p. 149-50.

¹¹⁴ “Wilderness of Sin,” p. 1.

Colonel Richard Meinertzhagen wrote *Birds of Arabia* in 1954. He noted that quail were observed in Arabia from mid-September to early May, and thought that they bred in Yemen. He also wrote that Egypt exported over three million wild quail for food in 1920. Herodotus recorded that the Egyptians caught quail with sticks, and Bedouins caught exhausted quail by hand.¹¹⁵

Dew is the condensation formed, usually overnight, as a result of warm air contacting a cool surface.¹¹⁶ Heavy dew is rare in the desert because water vapor in the air is too low. However, explorer George Wallin reported seeing dew from his location in the inland desert region of Midian called al-Hisma.¹¹⁷

When the layer of dew evaporated, behold, on the surface of the wilderness there was a fine flake-like thing, fine as the frost on the ground. When the sons of Israel saw it, they said to one another, "What is it?" For they did not know what it was. And Moses said to them, "It is the bread which the LORD has given you to eat. This is what the LORD has commanded, 'Gather of it every man as much as he should eat; you shall take an omer apiece according to the number of persons each of you has in his tent.'" (Exodus 16:14-16)

"They gathered it morning by morning, every man as much as he should eat; but when the sun grew hot, it would melt." (Exodus 16:21)

The house of Israel named it manna, and it was like coriander seed, white, and its taste was like wafers with honey. Then Moses said, "This is what the LORD has commanded, 'Let an omerful of it be kept throughout your generations, that they may see the bread that I fed you in the wilderness, when I brought you out of the land of Egypt.'" Moses said to Aaron, "Take a jar and put an omerful of manna in it, and place it before the LORD to be kept

¹¹⁵ C. Humphreys, op. cit., p. 293-5.

¹¹⁶ Neufeldt, Victoria, *Webster's New World Dictionary of American English*, p. 378.

¹¹⁷ C. Humphreys, op. cit., p. 285-6.

throughout your generations." (Exodus 16:31-33)

The Midrash Says notes that the natural taste of manna was that of milk when drunk by babies, and of honey when eaten by older people. It could assume any flavor a person desired.¹¹⁸

Some trees and bushes contain a sweet, sugary sap. When the bark is cut or bitten by an insect the sap falls to the ground, hardens, and can be eaten. Also, some insects feeding on sap exude droplets of a sticky substance. When it falls to the ground, it can be eaten.¹¹⁹ Bodenheimer, a botanist, organized an expedition to the Sinai Peninsula to learn about manna, and he published his finding in 1947. He noticed the scale insect *Gossyparia mannipara* biting tamarisk trees and then exuding a resinous secretion that was similar to a coriander seed. When it fell to the ground it was white. Bodenheimer ate some and wrote, "The taste of these crystallized grains of manna is particularly sweet. It is most of all like honey when it has been left a long time to solidify." Bodenheimer confirmed the Biblical description of manna.¹²⁰ Humphreys says that the tree and insect responsible for the manna the Israelites ate in the Desert of Sin is unknown.¹²¹

The high sugar content would have preserved the manna that was kept in jars.¹²²

Dophkah and Alush

"They journeyed from the wilderness of Sin and camped at Dophkah." (Numbers 33:12) "They journeyed from Dophkah and camped at Alush." (Numbers 33:13) Scholars are uncertain of the actual locations of Dophkah and Alush.

Humphreys says that the word Dophkah is related in Hebrew to a word meaning "knock" or "strike."¹²³ However, Wyatt notes that Dophkah means "cattle

¹¹⁸ M. Weissman, op. cit., p. 151.

¹¹⁹ C. Humphreys, op. cit., p. 289.

¹²⁰ Ibid, p. 290.

¹²¹ Ibid, p. 290.

¹²² Ibid, p. 291.

¹²³ Ibid, p. 304.

driving” and likely refers to the earlier years when Moses led his flocks in this area.¹²⁴

Other scholars suggest that Dophkah refers to mining or metalworking. Southeast of Hisma there are two major settlements, Shaghab and Shuwak. “Burton, in *The Land of Midian*, writes, “Shuwak proper is nearly a mile and a half long, and could hardly have lodged less than twenty thousand souls.” Burton continues by writing that the largest furnaces lay to the northwest, were originally five or six feet high, and built of firebrick and Hisma stone. Humphreys proposes that the Israelites rested in Shuwak.¹²⁵

Alush is not related to a Hebrew word. It might be a wadi. Scholars can only speculate.¹²⁶

Rephidim

The people pitched camp at a place called Rephidim. Rephidim is Hebrew and means “encampment”.¹²⁷

The Israelites arrived in Rephidim in the desert of Sinai where there was no water. Their thirst was worse than when they were in Marah. God punished them because they collected manna on the Sabbath. The Hebrews complained to Moses that he had brought them out of Egypt only to have them die from thirst.¹²⁸

Moses prayed to God. God told Moses to pass before the Israelites, see if anyone attacks, and strike the rock so that water will come out of it. Moses did this in front of the elders of Israel. (Exodus 17:5-6)

Porous rocks, such as sandstone and limestone, can absorb huge quantities of water. Sand, dust and other organic and inorganic matter can form a hard crust on the surface of the rock. Once the crust is broken, water can flow out of the porous rock.¹²⁹

William Whiston, 18th century Anglican priest and mathematician, commented that this rock could still be seen by travelers visiting the area, and was too

¹²⁴ B. Fry, “The Exodus and Replibim”, p. 2.

¹²⁵ C. Humphreys, op. cit., p. 304-5.

¹²⁶ Ibid, p. 305.

¹²⁷ L. Möller, op. cit., p. 242.

¹²⁸ M. Weissman, op. cit., p. 156-7.

¹²⁹ C. Humphreys, op. cit., p. 307.

big to be moved by horse or cart. However, he gave no details on the location of the rock.¹³⁰

Some characteristics of the rock that was split to quench the thirst of the Israelites include it must lie near Mount Horeb, there must be a hilltop nearby, there must be a plain within sight of the hilltop, the rock must be large and easy to recognize, and there should be visible signs of water on the rock.¹³¹

Möller notes that on the western side of Mount Horeb there is a rock that is split down the middle and it appears to be eroded at the base from water. It is situated on a plain with a hill.¹³²

God led the Israelites safely across the Red Sea, thus avoiding the Philistines. However, because they were now in danger from the Amelekites God took them on a circuitous route to Mt. Sinai.¹³³ The Amelekites were a nomadic tribe that dwelt between the Dead Sea and the Red Sea.¹³⁴

The Amalek were thirsty for Jewish blood. ‘Amalek’ comes from am lak and means ‘the people that came to lick blood.’ They rallied and assembled other nations while the Israelites cross the Red Sea. However, they witnessed the miracle of the splitting of the Red Sea, the other nations refused to attack. God protected the Children of Israel as long as they were loyal to him. Yet, they continually challenged God even though He provided quail and manna and protection. So, He allowed the Amelek to attack.¹³⁵

Moses told Joshua to select men to fight against the Amalek. God punished Moses because he chose not to fight. When Moses raised his hand, the Israelites prevailed, but when God caused Moses’ hands to tire and be lowered, the Amalek prevailed. Eventually, Joshua and the Hebrews succeeded in overpowering the Amalek. Moses built an altar to commemorate the war.¹³⁶ (Exodus 17:8-16)

A stone altar was erected a few hundred meters from the rock of Horeb. It is about one meter tall. The

¹³⁰ L. Möller, op. cit., p. 243.

¹³¹ Ibid, p. 245-7.

¹³² Ibid, p. 245-7.

¹³³ B. Fry, “The Exodus and Rephidim”, op. cit., p. 1.

¹³⁴ J. Hare, “Amalekite”, p. 1.

¹³⁵ M. Weissman, op. cit., p. 158-9.

¹³⁶ Ibid, p. 158-62.

Israelites erected stone altars to God on special occasions. Their victory over the Amelekites was such an event. A hill nearby could be the location from which Moses directed the battle. The hill is surrounded by a flat, sandy/gravel area that is easily reached by valleys from several directions.¹³⁷

Wyatt took video photographs of the altar. It appears to be about 3 feet tall, 2 feet long, and 1 ¼ feet deep. Wyatt is certain that Moses built this altar after defeating the Amelekites and called it “JehovahniSSI.”¹³⁸

Arrival at Mt. Sinai

It took two months to travel from Rameses to Mt. Sinai. Möller suggests that it took one week to travel from Rameses to Nuweiba, and another seven weeks to cross the Red Sea and travel in northwestern present-day Saudi Arabia to arrive at Mt. Sinai.¹³⁹

Different mountains have been proposed for Mount Sinai. “Menasche Har-el has summarized the arguments for and against thirteen different sites in *The Sinai Journeys: The Route of the Exodus*.”¹⁴⁰ The mountain that is named Mt. Sinai and located in Egypt is likely not the mountain that Moses climbed to receive the Ten Commandments. Other possible mountains are located in present day Saudi Arabia.

“Then God spoke all these words, saying, “I am the LORD your God, who brought you out of the land of Egypt, out of the house of slavery.”” (Exodus 20:1-2)

Route of The Exodus

The route the Hebrews traveled as they went from Goshen to Mount Sinai has been discussed and debated by researchers. Many of the current place names have been changed from the original. This makes it difficult to know the exact ancient route. One researcher has proposed a route that may be found at the following URL:

http://www.geocities.com/biblemaps/map_1.html .

¹³⁷ L. Möller, op. cit., p. 248.

¹³⁸ B. Fry, “The Exodus Continues”, p. 2.

¹³⁹ L. Möller, op. cit., p. 251-2.

¹⁴⁰ C. Humphreys, op. cit., p. 346.

Date

There are several theories for the date of the Exodus. The following table gives the author and the year they believe the Exodus occurred.

Author	Year	
	Jewish Chronology	Gregorian Date
Sanders ¹⁴¹		1447 BCE
Möller ¹⁴²		1446 BCE
Stewart ¹⁴³		1446 BCE
Turner ¹⁴⁴		1445 BCE
Long ¹⁴⁵	2448	1312 BCE
Humphreys ¹⁴⁶		1300 BCE

Pharaoh

Scholars disagree as to the name of the pharaoh in power at the time of the Exodus. Some “confusion comes from the fact that the ancient kings of Egypt had as many as five names. Some are titles while other appellations are various forms of the birth name, expressed as the Prenomen and Nomen, the Nebty name, Horus name, and the Golden Falcon name. The ancient Egyptians were very superstitious in this regard. Since they were concerned with the afterlife, they wanted to insure (sic) that their name was not forgotten. Even if a carved likeness of the deceased was left behind it was of no use unless it bore their name.”¹⁴⁷

The following table gives the authors and the Egyptian they believe was pharaoh at the time of the Exodus.

¹⁴¹ S. Sanders, *Israel and the Pharaohs: Israel, Egypt, and Canaan in the Bible and Near Eastern Texts*, p. vi.

¹⁴² L. Möller, op. cit., p. 203

¹⁴³ Stewart, *Solving the Exodus Mystery, Volume 1: Discovery of the True Kings and Pharaohs of Abraham, Joseph, Moses and the Exodus* p. 242.

¹⁴⁴ A. Turner, “Who Was The Pharaoh Of The Exodus?,” p. 2.

¹⁴⁵ J. Long, op. cit., p. 144.

¹⁴⁶ C. Humphreys, op. cit., p. 38.

¹⁴⁷ J. Long, op. cit., p. 78.

Author	Pharaoh
Amazing Discoveries ¹⁴⁸	Tutmoses III
Humphreys ¹⁴⁹	Rameses II
Long ¹⁵⁰	Merenre II (aka Nemtimsaf II, Neferkare the Younger)
Möller ¹⁵¹	Thutmosis IV
Sanders ¹⁵²	Amenhotep II
Stewart ¹⁵³	Amenemhet IV
Turner ¹⁵⁴	Amenhotep II

celebrate and mourn when we are sad. And if our prayers are part of His plan, He will take care of us just like He took care of the Israelites.

Exodus and Freemasons

What does the Exodus mean to us as Freemasons?

The Israelites often prayed to God. Often these prayers were complaints when they were forced to face difficult situations. God heard the cries for help from the Hebrews as they were forced to work for the Egyptians. He heard their cries when the Egyptian army approached and trapped them by the Red Sea. And He heard their cries when their water and food was exhausted and they were thirsty and hungry. Each time the Israelites complained and prayed, God took care of them.

He also caused the plagues to appear in Egypt causing much devastation and loss of life to the Egyptians. When Pharaoh ordered his army to chase the Israelites and they trapped them by the Red Sea, God created an avenue of escape for the Hebrews and trapped and killed Pharaoh's army. God also punishes those who do not obey His commands. He threatened Moses' life when he failed to circumcise his son. He made Moses hands so heavy that he found it difficult to raise them because he chose not to fight the Amelakites. By these acts we know that God guides the affairs of the world and punishes wicked people.¹⁵⁵

I suggest that it is important to pray and meditate and talk to God on a regular basis. God already knows our needs and will listen to us. He will hear our concerns and our joys. He will rejoice when we

¹⁴⁸ "Egypt and The Bible," p. 1-2.

¹⁴⁹ C. Humphreys, op. cit., p. 38.

¹⁵⁰ J. Long, op. cit., p. 79, 158.

¹⁵¹ L. Möller, op. cit., p. 138.

¹⁵² S. Sanders, op. cit., p. vi.

¹⁵³ T. Stewart, op. cit., p. 240.

¹⁵⁴ A. Turner, op. cit., p. 1.

¹⁵⁵ M. Weissman, op. cit., p. 113.

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