Dr. Friedrich Bender (d. May 2008) was a Kurdistan geologist for three years. Dr. Bender tells his experience in the Mount Cudi (Cudi Dagi) region searching for Noah's Ark in his article “Down the Tigris on a Raft” published in Kosmos 52 (1956) 4th Edition pp. 149-155, Stuttgart, Germany. In 1972, Dr. Bender published the Carbon-14 dating results of the wood found on Mount Cudi. Dr. Friedrich Bender was the Director and Professor at the Bureau for Ground Research in Hannover, Germany. Bender’s wife was not sure he found Noah's Ark and stated that Bender believes in many floods and that the site has been pushed up from the plain.

Chapter 10

1952-1954 Friedrich Bender, Ph.D.

This unusual trip was the result of an equally unusual event. In order to clarify what is to follow, I have to mention that I worked as a geologist in Kurdistan for almost three years. Kurdistan is the wild, romantic area on the eastern border of Turkey toward Russia, Iran, Iraq, and Syria. In the north it is dominated by the enormous inactive volcano Ararat, in the center by the alkali lake of Van, and in the south the young Tigris flows rapidly through chalky mountain formations toward the dusty plains of the Mesopotamian flatlands. It was in one of those chalky formations that I was caught by night, once again far from any human habitat. Fortunately, my guide Alaedin, a Kurd, had good advice. He mentioned that the Tigris was close by, and that there were numerous caves in the steep chalk cliffs along its bank. He speculated that there might also be some Nomads there. We did find the caves and also the Nomads, who normally dwell in their characteristic black tents, but who preferred the more comfortable caves as temporary domiciles.

Wild characters, tall, haggard, with an aquiline nose like the Sioux Indians, were grouped around a fire in a large cave in a picturesque way. Aladin introduced me to the group in his language, and the somber faces lit up with the mention of the magic word “aleman” (German). Another guest had arrived: a Hoca (say Hodsha), one of those highly esteemed priests, who in those areas are influential in worldly affairs as well. He not only spoke Kurdish and Arabic, but also Turkish, so that I could communicate with him. Served by the “host” himself, we had mutton, rice with hot green onions, and watermelon, which was piled up on a tin-plated copper plate the size of a wagon wheel. Everyone grabbed their portions with their hands or used the thin, tough flat bread as “shovel.” Well, the table manners and the copious amounts of garlic did not unnerve me, thanks to years of training, but I was not prepared for what happened next.

Suddenly, one of those wild fellows jumped up and began to circle around the fire, bellowing and howling like a mad dog. Convinced that the man had gone crazy I anticipated a general upheaval. Instead, one of them grabbed a large tambourine covered with an animal skin, and began to beat a rhythm on it. The dancer got increasingly wilder, until he suddenly stopped in the middle of a movement, not exactly a pleasant sight; glassed over, fixed eyes in a sunken face, the head shaved. And besides all that, his teeth were chattering loudly! While I was still watching him, I felt a rising vibration in the air within the cave, a vibration in rhythm with the infernal chattering of teeth. The vibration grew steadily; now some objects in the cave began to shake, and then it seized the people around me, then me and even the old Hoca next to me, until even the walls of the cave were shaking. I felt an obnoxious pressure in my chest and wanted to jump up to escape this spell. In that moment, the man reached into the fire with his bare hands, pulled out a red hot metal bar and placidly began to lick it. I saw clearly how the metal turned black where his tongue touched it. Then the dancer collapsed, bathed in sweat. The spectators murmured prayers, and the spell was broken.

In the same night, the Hoca and I discussed the Koran and the Bible for hours. I was surprised at his knowledge of the Bible. When we arrived at the story of Noah, I was informed that according to the Koran the Ark had landed on the Cudi-Dag, a mountain range at the border of Turkey and Syria. He said that if I did not believe it, I could find out for myself, since there were still parts of the old vehicle buried in the sand high atop Cudi-Dag. He said he had been there himself about 20 years ago, and had seen the place with his own eyes. He mentioned that it was a holy place of pilgrimage for all true believers in Kurdistan and northern Arabia, and that no Christian had ever been there. He thought that I might be able to find a guide who could take me through the difficult terrain.

This story fascinated me. For the next year, I tried to find additional source. I asked the ferryman on the Tigris by Hassan keyf; I asked the Shepard in the Eruh mountains; I asked the Nomads at the river Botan, who were coming up from Mesopotamia. All knew the old saga about the landing place of Noah's Ark on the Cudi-Dag. Alaedin and I made two failed attempts to reach the mountain range. In the fall of 1953 the rains of an early winter forced us to retreat; in the spring of 1954 it was unusually high snowfall. Then I had a good idea: people as far back as the days of Xenophon had used inflated mutton skins to navigate the Tigris. Then why not go down the Tigris on a raft? The raft cost an equivalent of ca. 100 German Mark and consisted of 32 specially treated, inflated mutton skins, held together by some willow branches
and a few ropes. Two oarsmen who knew the river were included in the price. Alaedin did not want to come along, as he was extremely afraid of water. Only when I presented him with a vintage model pellet gun for his services did he consent, albeit still reluctantly, to attempt the adventurous trip with me. 

For as long as I live I shall never forget this trip on the river swollen with the waters of spring, sitting on the inflated skins a mere 10 cm above the brownish yellow floods. Spinning, we shot past rocks jutting out of the water like the Lorelei. The commentary of the oarsman was not much help, either: here is the dead man’s curve of Suleiman (“here the brave Suleiman sank into the floods long ago”), or, this is Ali’s salt stretch (“here Ali lost his precious cargo of salt from his raft”). Once we went on land and climbed up to the lonely forests of Eruh in order to watch some bears. But we were not lucky. We only saw a cute bear cub that had been captured by the farmers of a small village. In spite of the difficulties we arrived at the Syrian border close to the old Kurdish city Cizre. We had floated downstream for about 140 km. Everywhere we had been welcomed in mudhuts and tents. When we pulled the raft on land, we saw the Cudi-range towering over the Tigris delta like a massive wall. Its tallest peaks were still snow-covered. 

We spent all Easter Sunday hiking over endless gravel fields toward the mountain range. Late at night we reached the Kurdish village Giroculiye, where the mud huts were glued to the bizarre cliffs of the Cudi like wasp nests. It is there that we found the man who leads the pilgrims to Noah’s landing place! He had never taken a Christian up there yet. We negotiated for hours before he consented to make an exception in my case. I think I owed this mostly to his wife who assured him that I loved very much like a blonde beduin, who had played a role in her dreams in times unfortunately long passed. It is easy to imagine how honored I felt. Before dawn on the day after Easter we started on our way, accompanied by a few Kurds equipped with spades. With sunrise the ascent became strenuous; those mountain-dwellers were not climbing slowly! Toward 8 o’clock we traversed a hillside covered with clear mountain crystals, and at 9:30 we climbed through a steep chimney, at the upper end of which I noticed something peculiar: there were large blocks of a conglomerate which was cemented by limestone sinter. They had undoubtedly originated from the dolomite outcrop. They were well rounded at the edges and up to fist size. According to my altimeter the place was about 1900 m above sea level and therefore ca. 600 m above the highest, probably diluvial gravel terraces of the Tigris valley. 

After we had climbed for ten more minutes, my guide showed me the place that they thought to be the landing place of Noah’s Ark at about 2000 m. It was a basin directly below the summit of the Cudi-Dag, ca. 300 m long and open toward the South, the direction of the flatland. Above the basin I found the ruins of a small mosque or protective hut made of thick, coarsely hewn blocks of rock. I noticed an inscription in peculiar characters unknown to me on one of the rocks. 

Presently we began to remove the snowcover, which was 1 to 2 meters thick, at several locations along the edge of the basin; I had been assured that wood pieces were to be found in the sand under the snow. We did find fine sand composed mostly of limestone with some quartz. In spite of my skepticism my excitement mounted as we discovered a brown discoloration of the sand at a depth of about 1 m, under which we uncovered black wood, which was completely decomposed. I suspected that we were looking at the remains of an ancient camp fire. But I soon discovered that there was asphalt in that wood! I had taken some chemicals along that are used in extracting bitumen, asphalt, or oil from rocks. Encouraged, we dug deeper, only to find that below 1 m was frozen solid. We could not dig in the lower areas of the basin, either, since the snow cover there was several meters high. We had no further success. 

Ominous thunder clouds were shrouding in the tall peaks to the North; from the West, thick fog was moving toward the Cudi; a cold wind penetrated coats and sweaters. The Kurds insisted that they had shown me hard evidence proving their theory of the landing place and had no intention to waste any unnecessary energy. So we began our descent. The way back over the gravel fields and up river across the arid chalky mountain formations was strenuous. It took almost a week. But even in the most primitive and poor villages, where the meager soil is worked with hand carved wooden spades and the flour ground between two stones we found kind hospitality.

To this report I would like to add the following note: there is archeological evidence that Mesopotamia was flooded in prehistoric times. The Cudi range is part of the natural northern border of the Mesopotamic flatland. In the Cudi range there are conglomerates about 600 m above the highest gravel terraces of the Tigris valley. It is possible that these conglomerates were transported to such heights by more recent tectonic movements after their formation. There is proof of geologically very young crustal movement in other locations in eastern Anatolia. 

The entire high plateau between Ararat in the North and the Cudi range in the South was formerly called “Agri Daglar,” according to various Kurds, and it is possibly from that name that our “Ararat” has been derived. I personally think that this matter should be investigated. Time and again old traditions prove to contain a grain of truth, and many a successful search has begun with fewer leads than are available in this case.


Wood remains from Cudidag, a mountain range at the northern edge of Mesopotamia, were dated according to the C-14 method. They are approximately 6500 years old and therefore pre-sumeric. The place where the wood remains were found is located in an area known as the “place where a boat landed” according to the epic poem of Gilgamesh and the
Koran. The altitude of the find at 750 m above the gravel terraces of the plain is difficult to account for if the remains are indeed from a boat. The Cudidag is a south-verging anticline (geologic ridge with steep southern flank) of Jurassic and cretaceous limestone with an axis bearing West/Northwest-East/Southeast. The steep southern flank is accompanied by two parallel main zones of disturbance, between which there are strongly disturbed and displaced limestones form the middle Eocene. To the South of it there are late tertiary land and river deposits, probably from the Pliocene, which over a large area are covered by high gravel terraces and fans of debris in terraces. At least three terrace levels can be differentiated. Their layering in regards to age is unexplained in many instances. The place where the examined wood remains were found is located in a basin at the upper southern face of the Cudidag, about 300 m northeast of the Kurdish village Kericulya at an altitude of approximately 1700 m (altitude unconfirmed) above NN and therefore about 750 m above the highest gravel terraces. The flat basin, which is open on its south side, is surrounded by thick to massive calcium and dolomite deposits of the Cudi group. On April 6, 1953, it was largely covered by snow. Underneath there was a sediment consisting of clay and fine sand which was not given a detailed examination and which was colored dark brown and blackish at a depth of 0.8 to 1.0 m and contained decomposed wood remains up to the size of a pea. Most of these wood pieces were cemented together by a sort of asphalt or tar. Kurdish guides, who considered the place of the find holy ground, did not allow further digging or more extensive examinations.

After the asphalt had been removed from the wood fragments they were dated according to the C-14 method by Dr. M.A. Geyh and Dr. L. Benda in the Saxon Federal Bureau for Ground Research in Hannover, Germany and age of 6635 +/- 280 years (before 1950) was the result. A second test using all of the retrieved material confirmed this result. A possible source of error would be a contamination with remainders of the asphalt, which was assumed to be older than 50,000 years. In this case the wood would be a maximum of 400 years younger if the asphalt particles on the cleaned wood amounted to 5%, which can be considered unlikely.