ANTHROPOLOGY

Search for Missing Link

An anthropological expedition spends three months in Lebanon, Syria, Iraq and Iran, the area known as "the nursery of man." This is an exclusive coverage.

By DR. HENRY FIELD

➤ BEIRUT, LEBANON—Is there a true "missing link" to be found in Iraq along the path ancient man first followed from Asia to Europe and Africa?

What has happened to an ancient "lost city" visited only once before in modern times—in 1928? This mass of ruins is also in Iraq, near Kish. When I was there 22 years ago, I became so sick from the desert heat that I could make no explorations.

These are only two of the questions being pursued on a three months expedition along the trail through Lebanon, Syria, Iraq and Iran which was followed by the first ancestors of western man.

Our party which includes Robb White, noted newspaper man, expects to travel thousands of miles, by jeep and Plymouth Suburban across the desert. We have 10 major objectives along the way and at all those places we hope to find things which will add to our knowledge of prehistoric and modern man.

Much of our work will be done between the storied Tigris and Euphrates rivers, an area that once was incredibly rich and fertile. It will be hard work, hot and dirty. It will involve digging in dank and dirty caves, painstaking measurements of living people and long hot rides over the dusty

Prehistoric Man Was Here

ABOU KEMAL, SYRIA—The Peabody Museum-Harvard University Expedition to the Near East has discovered distinct settlements of stone age or Paleolithic man in this area. Along a northeasterly line from Damascus to the Euphrates river we found 10 places where prehistoric man once lived.

This discovery adds more evidence to support our theory that at one time, millennia before recorded history, this part of the great Syrian Desert was a watered and fertile plain. The flint scrapers and lance heads which were found show that animals must have been plentiful and could be killed with enough ease by the human inhabitants to provide them with food. The discovery of flint handaxes seems also to show that there were trees here where, to-day, there is only arid desert.

The most interesting of the sites found was on an escarpment overlooking the Wadi Rutga in northeastern Syria. Today man could not survive long on this stony ridge beside a dry and barren stream bed. However, at one place here, where the

evidence of flint could be seen by flashes of sunlight from the smooth surfaces, pre-historic man must have lived in, for him, great comfort. An abundance of flint provided him with the tools and weapons he needed and a fine assortment of handaxes, choppers, scrapers, knives and flakes were found. Twenty thousand years ago a stream probably flowed in the wadi, and the low slopes were no doubt covered with vegetation.

The discovery of these 10 settlements across the Syrian Desert provides strong evidence to support my theory that prehistoric man used this area as a main route for his migration between Asia, Africa and Europe. For many years the Syrian Desert, dessicated and almost barren, was considered by scientists as a natural barrier to migration similar to that of the salt desert in Persia. However, this discovery of ancient settlements provides further evidence that, in Paleolithic times, the desert was in fact not a barrier at all but a logical area across which to migrate westward to the Mediterranean.

For this part of its itinerary, the expedition had as a temporary member J. H. Keeley, U. S. Minister to Syria. Mr. Keeley made a most fortunate "find" of what appears to be a remnant of prehistoric carving.

Surrealist Animals and Mounds

DEIR EZ ZOR, SYRIA—With permission of the Syrian authorities, the Peabody Museum-Harvard University Expedition to the Near East was allowed to enter the restricted zone around Hassetche in northern Syria. Accompanied by a member of the Syrian police, who was armed with a sub-machine gun, the expedition travelled from Deir ez Zor beside the Euphrates to within sight of the Turkish border at Ras el Ain.

Tell Halaf, one of the most important sites in western Asia, was inspected and the marks of Baron Max von Oppenheim's work were still to be seen. Baron Oppenheim spent many years here laboriously excavating huge stone figures of fantastic animals which would probably be called "surrealist" by moderns. These statues were shipped to Oppenheim's private museum in Berlin only to be destroyed, as the remnants of Babylon were, by bombing in 1944.

The village of Ras el Ain is a pleasant, stone-built town inhabited by Arabs, Turks and Chechens. Water is abundant as there are about 200 bubbling springs which form

the headwaters of the Khabour river. On both sides of the Khabour, we found many grass covered mounds littered with potsherds. Also along the Khabour are the curious villages of about 8,000 Assyrians who were settled in this region by the League of Nations. Their houses are shaped like overgrown conical beehives and are made of mud. These Assyrian refugees appear to be living in some happiness in this healthy but isolated region of the world.

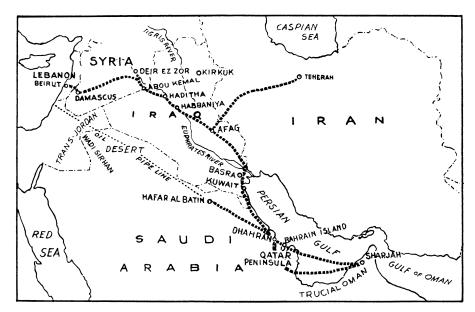
Physical Measurements Taken

HABBANIYA, IRAQ—The origin of the modern Assyrian has long been a puzzle to anthropologists. One of the primary objectives of our expedition to the Near East is to find evidence of this origin and to determine, if possible, whether the present day peoples are descended from the famed Assyrians of ancient times.

In 1934, we took anthropometric records of a group of Assyrians but the measurements were made under most difficult conditions. When the results were tabulated the data were found to be in too great conflict to be used as a basis for determining any origin by comparison. Recently, however, in Habbaniya, conditions for making a new series of measurements were ideal. Here, at this large Royal Air Force base,



LEADER OF EXPEDITION—Dr. Henry Field, leader of the Near East exploration, was formerly associated with the Field Museum of Chicago. He is the first anthropologist in modern years to be allowed to visit Saudi



HIGHLIGHTS OF EXPEDITION—The Peabody Museum-Harvard University expedition on an exploration of the "Nursery of Man" visited the various places, as shown by the heavy dotted line, in the countries of Iran, Iraq, Syria and Saudi Arabia. Long known as the crossroads area where stone age people must have lived, few traces of them have hitherto been found and no adequate search for prehistoric man has hitherto been made in this region.

Air Vice Marshal J. N. Boothman provided us with 531 Assyrians who were working there as levys. Under military discipline measurements could be quickly and accurately made.

Fortunately, this group of Assyrians were from tribes including the Upper and Lower Trijari, Boz, Diz, Tkuma, Jelu and Marbishu. This provided a good cross-section and enabled us to get much information from the men as to their tribal origin and history. (Some of them were much more interested in the welfare of their relatives in Chicago).

A somewhat confusing characteristic of the typical round-head Assyrian is the flattening of the back of the head. This is caused by the custom of strapping the children into a cradle from birth continuously for the first two years of their lives. The pillow under the head grows progressively harder thus artificially deforming the back of the head. The reasons for thus confining a child seem to be, in the main, two: first, it forcibly prevents the child from crawling about and being a nuisance and, second, there is a superstitious belief that it keeps away evil spirits. This deformation seems to have no ill effect on the mentality of the Assyrians, their heads growing broader in compensation.

We hope that, when this new series of measurements are tabulated at Harvard, new light will be thrown on the original source of these persecuted people.

There was some concern on the part of many of the levys as to the welfare of their 8,000 compatriots who were settled by the

League of Nations in a remote part of Syria. Since the Expedition had recently visited these villages along the Khabour river we could assure the men that all was well with their friends.

Sand Covering Babylon, Kish

AFAG, IRAQ—This mud brick and sunbaked Arab village provided a meeting place for two U.S. expeditions—that of the University of Pennsylvania, led by Dr. Don McCown, and our Peabody Museum-Harvard University Expedition to the Near East.

We, along with Dr. Faraj Basmachi of the Iraq Department of Antiquities, drove down from Baghdad, stopping on the way at Babylon and Kish, and spending some time in search of a "lost" city east of Hilla.

The ruins of Babylon, slowly filling in again with blowing sand, were doubly sad when it was remembered that the treasures of this fabulous and beautiful city are now gone forever. Excavated by the Germans in the early 1900's, almost everything of value was shipped to Berlin. There the city of Babylon was reconstructed almost in its entirety only to be finally destroyed by the air raids on Berlin in World War II. What has become of the famed Ishtar Gate and other remnants is not known although there is a rumor that the Gate survived the bombing and was removed later to Russia.

We also visited Kish. Here, too, blowing sand is rapidly obliterating all traces of this city—according to legend the first founded after the Flood—and it will soon be only a barren mound rising from the desert floor.

While on the Kish expedition in 1928, Eric Schroeder and I made an exploratory trip between the Tigris and Euphrates rivers. We found a low and unidentified mound surrounded by ruined buildings and with many potsherds scattered about. At that time the going was slow as we both were travelling by horseback. Now the same trip was made again but this time by jeep which, while somewhat more uncomfortable than a horse, was swifter and equally able to climb in an out of the ancient irrigation ditches.

Aid in re-discovering the "lost" city was also given by Air Vice Marshal Boothman who kindly flew down from his base at Lake Habbaniya and circled a low mound topped by a rectangular ruin rising from a perfectly arid waste of desert. Since 1928, however, this mound had been identified by the Iraq Department of Antiquities as Tel Abou Hatab and had been found to be of more or less recent Islamic origin.

Here at Afag the two expeditions met and Dr. McCown invited us to visit the excavation going on at Nippur, some six miles out in the desert from Afag. We were shown the remains of the city and the ziggurat (or temple) and many of the relics taken from the site, including some small gold trinkets and rings and small statues in both stone and ceramic.

Implements Found

TEHERAN, IRAN—Men of the Old Stone Age lived in the caves of Luristan in western Persia.

The first proof has been obtained by our Peabody Museum-Harvard Expedition. Three caves near Khurramabad were studied.

Konji cave, which stands midway up a 1,000 foot limestone mountain, overlooks a vast green plain cut by a meandering river. Snow covered slopes form a continuous range across the valley. This is indeed an ideal location.

Flint implements and flakes made by hunters of the Old Stone Age were found in a small trial trench just inside the cave entrance.

On the slopes outside two other caves in nearby valleys we also found flint flakes indicating prehistoric inhabitation.

It may now be said with certainty that Paleolithic Man lived in Luristan, famous previously for its mountains, fierce tribesmen and superb ancient bronzes.

I believe that ancient man migrated from Central Asia southward along the eastern border of Persia, then turned northwest through the pleasant valleys of Khuzistan and Luristan until the passes of Sulaimaniya, Aqra and Rowanduz led onto the Mesopotamia plain.

We returned to Baghdad to make preparations for excavations at Baradost cave above Rowanduz Gorge in northeastern

Iraq. Here it is hoped to find another link in the chain of evidence for Stone Age cultures now extending from southwestern Sinai, the wilderness of Jordan and the North Arabian or Syrian Desert.

5000 B.C. Pottery Found

KIRKUK, IRAQ—During excavation of a nine-foot sounding trench in Diana Cave high on Baradost mountain in northeastern Iraq, painted pottery with incised designs of Tell Hassuna type has been found.

This pottery, previously known from the northern plain of Iraq and attributed to the period of about 5,000 B.C., must have been used as an article of trade into Kurdistan about 3,000 years before Abraham lived at Ur of the Chaldees.

The pottery was identified as of Tell Hassuna type, which will later be studied with the remainder of the sherds and animal bones in the Iraq Museum in Baghdad.

Diana Cave, located about 3,500 feet up on Jebel Baradost, faces east over a narrow, rocky valley. A pile of snow covered the approach down the slope from above. Native hunters were sent out to supply fresh meat.

Work has been transferred to the Pastoun Cave about a quarter mile to the east.

Bear Is Main Diet

BARADOST MOUNTAIN, IRAQ—Members of the Peabody Museum-Harvard University Expedition to the Near East have been dining for some time on a dilapidated bear.

The party climbed up the Baradost mountain to search in the caves there for traces of prehistoric man.

Since it took the best part of the day to go by mule back and on foot up the mountain in the wildest part of Kurdistan, shopping for food was somewhat difficult. However, the expedition confidently expected to have a steady supply of fresh meat furnished by the expert Kurd marksmen. We were assured that there would be no lack of gazelle steak, ibex shish kabab, quail and grouse.

Instead, for three days the hunters combing the still snow covered mountains found nothing. The members of the expedition were forced to live on what few cans of food there were and the paper-thin slabs of Kurdish bread. This diet was rather meager for men engaged in searching the lower reaches of a huge cave and excavating the entire front of it.

On the fourth day luck turned. Adu David, an Assyrian, returned from the daylong hunt with one large bear. None of the scientists was expert in determining the age of bears, but this one seemed to be well along in the normal life span of such animals. The teeth were yellow and considerably worn, some being entirely missing. The fur was somewhat spotty and several toes were gone, but the bear appeared to be edible.

The cook sliced the meat very thin and skewered it on kabab spikes. He then

cooked it over an open fire and served it on the spikes to the hungry members of the expedition.

By the time the bear was consumed a consensus determined that the meat of that particular bear at any rate was tasty. The degree of toughness was comparable to that of a rubber boot and it was very close to indigestible.

Fortunately for the health and welfare of the scientists more concentrated hunting brought in two ibex to relieve the monotony of bear meat and a supply train of one donkey and a small Kurdish boy was organized. This returned with chickens of the same vintage as the bear and eggs somewhat younger.

Skull and Bone Series Collected

HADITTA ON THE EUPHRATES, IRAQ—Deep in the hidden recesses of a cave which was the home of wolves or hyenas, we found bones, bones, bones, thousands of animal bones—and a few human skulls.

While we examined the bones and the skulls, one member of our Peabody Museum-Harvard expedition stood guard, armed with the thighbone of a camel, in case the residents of the cave showed their resentment by charging us with bared fangs. Wolf footprints were large and clear in the dry dust and in one corner of the cave some fresh meat attracted a swarm of ants

We reached the cave by wriggling uncomfortably through a narrow rocky tunnel. The air inside was dry and musty, the atmosphere hot, dusty and fetid, rank with the smell of the animals for which this cave was home.

A fine series of skulls and bones of camel, horse or donkey, wolf, hyena, jackal, fox, sheep and goat were collected and carried with great difficulty through the tunnel to the small entrance.

Several fragmentary human skulls and a few mandibles were also found. Four of the skull fragments were heavily mineralized and abnormally thick.

Could these be the skulls of the prehistoric hunters for whom we had been searching? Were they brought in by ravenous wolves or hyenas as a special delicacy? These questions may be solved by chemical analysis at Harvard, where they will be shipped on loan for study.

Examination of three skull caps revealed possible stone knife marks on the edges. This is reminiscent of the Magdalenian skull cap from Le Placard in France which is believed to have been used as a ceremonial drinking cup.

After two hours below ground we were glad to crawl upward to daylight—and fresh air.

Assyrian Belles Measured

HABBANIYA, IRAQ—Blonde, blue-eyed or gray-eyed women with peaches and cream complexions—these and their older,

more thick-set friends, submitted to measurements and physical examinations here—all in the interests of pure science.

The Peabody Museum-Harvard Expedition secured statistics on 126 women and 530 men, young and old Assyrians in this Civil Cantonment of the British Royal Air Force. With measurements of stature, sitting height and observations of the head and face, it should be possible to determine the racial position of these men and women among the peoples of Southwestern Asia.

As they passed through the assembly line, observations were also taken of their skin color, hair, eyes, noses and teeth. Medical assistants took their weight, pulse rate and respiration.

With their eyes downcast, the younger girls passed through the ordeal reluctantly but nobly, obeying orders of the R.A.F. But, once it was announced that they were to be photographed, they were far from reticent. They crowded around the camera, eager to get into the picture. The camera took away their shyness, and they crowded around the door and pushed and shoved to get into the room to be measured and observed.

Two days later a set of prints was delivered to them as a reward for their cooperation.

Two basic types were observed: a tall, thin, light-haired, blue-eyed or gray-eyed group, and a thick-set, round-faced, dark brown-eyed group. The Assyrian women appear to be less racially mixed than the men.

Red Ocher for Rosy Cheeks

WESTERN DESERT, IRAQ—In prehistoric times, red ocher was a girl's best friend—as rouge is today.

Far out in the desert lies the Gaara Depression 50 miles long and 20 miles wide. In the center of the depression rise five hills, with hard caps of limestone, making them visible for miles around. On Jebel-el-Afaif, whose summit is adorned with a castle-like rocky formation, the members of the Peabody Museum-Harvard Expedition found an ancient mine. Large lumps of red ocher were strewn on the surface of the slope.

Ocher is any of a class of natural earths, mixtures of hydrated oxide of iron with various earthy materials, ranging in color from pale yellow to orange and red.

Near this ancient "cosmetic" mine, crude flint picks were strewn about in profusion. This was evidently an important source of the priceless red powder used by dozens of generations for body paint.

In addition to giving life to pale cheeks, red ocher was used to assure life in the next world. Graves were believed to have been lined with the material in the hope that because it was the color of blood, it would give life to the corpse.

Red ocher, today, has slipped from a place on the cosmetic tables of the women

of Babylonia and Sumeria to the substance used for branding sheep. While we were at the mine, an Aniza Bedouin boy climbed with easy grace up the hill. He picked up several lumps of the ocher, explaining that, after powdering, water was added to form a thick red paste, which is applied to the backs of sheep as a property mark.

A sandstorm began to roll toward us from the northwest, accompanied by warning gusts of hot wind. We left the mine, and just made the camp before we were engulfed in the whirling sand.

Much Flooded Land

BASRA, IRAQ—Thousands of acres of flooded area were below as the Iraqi Airways plane left Baghdad. Baghdad indeed had become an island, surrounded by the swirling brown waters rushing southward from the high mountains.

Here in 1950 was a small-scale repetition of the flood which covered lower Mesopotamia some 5,000 years ago. Noah and his kinfolk did not have the modern advantages of aerial surveys and warnings by telephone and radio. The heavy winter snowfall was melted by a quick thaw and the twin rivers—the Tigris and the Euphrates—overflooded their low banks and joined into one vast torrent sweeping all before it into the Persian Gulf.

As we flew south we passed over Kish, "the first city founded after the Flood" according to the cuneiform texts. Here I had spent two seasons excavating with the Field Museum-Oxford University Expedition. Here we had found the scientific proof of the Flood. A few miles to our east lay Babylon, its famous Hanging Gardens now a desolate waste of sand.

An hour later we passed near Ur of the Chaldees, the home of Abraham. A Beduin shepherd was leading his flock of sheep and goats to a nearby pasture. This scene was the same as that of 50 centuries ago as recorded in the Bible.

We swung westward to fly over Al Qurna, where the Twin Rivers meet to flow as one into the Persian Gulf. This is the location of the traditional Garden of Eden. Now this area is nothing but a sandy waste with a few low mounds designating former habitation.

Above the inland lake known as the Horal-Hammar, the Marsh Arabs could be seen poling their gondola-like *Mashahuf* through the tall reeds or across open water. Many of their tiny villages were precariously near to the rising waterline.

The plane swooped down onto Basra airport which was fortunately dry as a bone.

Shade Is 112 Degrees

KUWAIT, PERSIAN GULF—It certainly seemed improbable that prehistoric man, for whom this Peabody Museum-Harvard Expedition is searching, ever crossed or lived on the hot and sandy waste of this area, but even here we found crude flint flaked by human hands.

Flying over water and desert from Basra, we landed here in a blast of furnace-hot wind that swept across the landing field. In our search for traces of former habitation, we drove four miles west of Magwa to a low mound. On the summit lie two rectangular lines of dressed stones, either the foundations of small buildings or the remains of graves. Nearby on the slopes I found the stone flakes of crude flint worked by ancient man.

We searched for flint implements around a small lake of bitumen. Col. H. R. Dickson, world-authority on Kuwait, had found a good series in this region. However, drifting sand had covered the area only a few days before.

At the southern extremity of Kuwait on the border of the Neutral Zone we climbed Jebel Gurain, the twin-horned peaks visible from afar. Here we found a few poor flakes indicating the presence of ancient man, although the word "ancient" here may mean but a short span.

Black spots began to flicker in front of my eyes. I felt giddy. The wind was strong. The sunlight intense. The shade temperature was 112 degrees.

Col. Dickson, former British political agent and now adviser to the Kuwait Oil Co., has lived in Kuwait for almost a quarter of a century. He has found stone implements at three other localities. Very generously he presented the finest specimens to the Peabody Museum at Harvard. Col. Dickson and his wife are the authors of "The Arab of the Desert," a recent classic on the way of life of the Bedouin. Mrs. Dickson has collected the flora and fauna of Kuwait, so that their joint efforts form a landmark in the basic research of the Persian Gulf.

The modern population of Kuwait town is markedly different from that of Baghdad. In the market is a rare racial medley of Arabs, Persians, Baluchis, Negroes and a few hawknosed Bedouins from the great hinterland of Saudi Arabia. Here the physical anthropologist would have to select his subjects with the greatest care for his results to be worth recording.

Immense Burial Ground

BAHRAIN ISLAND, PERSIAN GULF—At least 50,000 burial mounds—tumuli, they are called—rise on the main island of Manama half an hour south of Muharriz, where we landed by air.

Local authorities suggest that Bahrain was considered as the sacred spot for burial about 3,500 years ago and that the dead were brought here from all around.

This is similar to the custom prevailing at the shrine of An Najaf in Iraq where thousands of bodies are brought annually by car, camel and donkey to be interred in the holy ground.

The largest Bahrain tumuli are 80 feet high and 150 feet around the base. Stone chambered tombs occupy the central position. Many have been opened during this century, the majority rifled. I am hoping

to obtain permission to open one tomb before leaving Bahrain. Permission must be granted by the Sheik of Bahrain.

No Stone Age traces have ever been found on these islands, the earliest evidence for occupation being contemporary with the earlier phases of the historical periods in Mesopotamia and Persia.

With regard to the modern inhabitants of Bahrain, they are even more mixed racially than the dwellers in Kuwait to the north. For here on these islands have come sailors, fisherfolk, pearl divers as well as Persians, Indians, and Baluchis and many, many others.

C. Dalrymple Belgrave, who has been Adviser to the Sheik of Bahrain for 24 years, suggested that a series of Beharna might prove of anthropometric interest for they are believed to be the descendants of the aborigines, or at any rate the first settlers, on these islands.

Hence I measured 45 Beharna men in the village of Jidd-Hafs on Manama island. They were certainly different from any of the groups I have studied since 1925 in Iraq or Iran. When the measurements and observations have been tabulated and the photographs studied, it may be possible to determine their racial origin.

Land of Singing Sand

QATAR PENINSULA, PERSIAN GULF—The village of Dukhan, a small community in the center of the western side of Qatar Peninsula, lies 40 minutes in a small six-seater plane across the water from Bahrain Island.

Here I talked with Mansur (the local chieftain) as we sipped coffee as only desert-dwellers know how to make it. Mansur is a tall, distinguished-looking Arab in his flowing robes. He dictated to me the names of the Beduin tribes and sub-tribes of this peninsula. He drew with his long fore-finger a tribal map. This was the more extraordinary for Mansur was blind.

We drove across to Umin Said on the eastern side, stopping to examine a cave, 120 feet deep in the limestone. There was brackish water at the bottom. Nowhere could I find traces of ancient habitation inside or outside this cave, which long must have been a well-known landmark for water is scarce indeed in this rocky and sand-strewn wilderness.

To the south rose crescent sand dunes which move constantly. Here are the "Singing Sands" where the wind strikes a slope to cause deep moans like a giant in distress.

On the road to Doha we passed several ruined villages. One informant said that in this part of the world after a generation or two the entire population often decided to move along the coast.

The last three hours of the journey were unpleasant. The wind was hot. Dust devils swirled around the car. The scenery was unending low, rocky hills and sand. We arrived panting in Dukhan.

(Continued Next Week)