Another ancient civilization found in Central Asia

A major early civilization — rivaling in sophistication the ones that emerged in the Indus Valley and Mesopotamia, the famed cradle of civilization — apparently thrived in central Asia between 2200 B.C. and 1800 B.C.

These people, who lived in desert oases in what is now Turkmenistan and Uzbekistan, used irrigation to grow wheat and barley, forged distinctive metal axes, carved alabaster and marble into intricate sculptures, and painted pottery with elaborate designs, many with stylized versions of local animals, according to discoveries that have emerged during the past decade or so.

Since no one knows who the people were or what they called themselves, archaeologists have given the culture the name Bactria Margiana Archaeology Complex, or BMAC, after the ancient Greek names for two lands in the region.

"Who would have thought that now, at the beginning of the third millennium A.D., we'd be discovering a new ancient civilization," said Fred Hiebert, an archaeologist at the University of Pennsylvania Museum in Philadelphia. He has excavated in the region nearly every year since 1988, shortly before the Soviet Union fell.

Some researchers consider writing to be a criterion for any true civilization, and now Hiebert said he thinks he may have evidence for meeting that, too — a tiny stamp seal carrying four letter-like symbols in an unidentified language. He has dated it to 2300 B.C.

Hiebert presented his findings this month at an international meeting on language and archaeology at Harvard University.

"The implication of the seal is incredible," he said, because there's no existing evidence that these people had a written language. And the characters engraved in the stone stamp are unlike any ever seen.

"It's not ancient Iranian, not ancient Mesopotamian. I even took it to my Chinese colleagues," he said. "It was not Chinese."

How could such an advanced culture have been so overlooked?

In the 1970s, Soviet archaeologists working in remote deserts west of Afghanistan came upon vast ruins, each one bigger than a football field. All were built with the same distinct fortress-like pattern — a central building surrounded by a series of walls.

By the mid-'70s, the Soviet archaeologists had discovered several hundred of these structures in the areas known as Bactria and Margiana.

But their findings remained little known to the outside world because they had never been translated from Soviet journals.

"I was absolutely stunned," said Harvard archaeologist Carl Lambert-Karlovsky, who reads Russian and who, 20 years ago, first read some of the Soviet literature on this unknown world. He transferred his amazement to Hiebert, who was one of his graduate students.

The editor has been stymied trying to locate Bactria and Margiana in archaeology textbooks, atlases, and National Geographic maps. The sites mentioned lie in the Kara Kum valley/desert which can be seen in the map running north and south near the edge of the Turkmenistan/Uzbekistan border, closely following the direction of the Amu Darva River. The dozens of settlement ruins of the unknown civilization stretch east acorss the Kara Kum desert into Uzbekistan and perhaps the northern part of Afghanistan. The area is 300 to 400 miles long and 50 miles wide.

No one knows the extent of this civilization, which may reach beyond Margiana, deep in the Kara Kum desert, and Bactria, which straddles the Uzbek-Afghan border.

Hiebert said he believes that a third area, Anau, outside Ashgabat near the Iranian border, is connected to this civilization, perhaps even the origin of the culture. It is about 2,000 years older, going back to 4500 B.C., or the Copper Age. A New Hampshire archaeologist, Raphael Pumpelly, had discovered ancient ruins at Anau in 1904, but the site did not receive much attention from the Russians. Only now, said Hiebert, are all the pieces, once divided by political boundaries, falling into place.

Over his years of study in the area where the civilization existed, Hiebert discovered that the various oases "looked like they were in the middle of nowhere, but they are part of the route everyone went on from west to east for thousands of years."

The oases, built in moist areas, created natural step-