100,000 year old stone tools found in Haldimand

By Ilse Kraemer and Jim Windle

Ilse Kraemer discovered stone tools coloured red by what is known as Desert Varnish. This phenomenon occurs very slowly and only under certain circumstances and according to the depth of the patina into the stone. The artifacts have been estimated by European University scientists to be more than 100,000 years old, long before the supposed Bering Strait Land Bridge. Here in North America science has rejected that notion because it does not correspond with the accepted scientific norm. The lighter coloured edges show where samples have been chipped off for scientific study. PHOTO BY JIM WINDLE

BRANTFORD – In 1983, the Anthropological Journal of Canada, published a book dedicated to the memory of the father of archaeology and anthropology in Canada, Thomas E. Lee, who made discoveries on Manitoulin Island a number of years ago which threatened the accepted scientific version of history.

Even today, mainstream science teaches that the North American Indian came to this side of the world by way of a land bridge across the Bering Strait from Asia as the first people in North, South, and Central America sometime around 12,500 years ago.

But Indigenous American cultures have ancient oral histories that greatly differ from the land bridge theory. Some newly discovered artifacts have also refuted it.

Today, some are now considering that although the land bridge may have enabled some human transcontinental travel, it may not have been the only route traveled, or the only explanation of how the American Indian came to be living for countless generations, separate from the then known world.

The land bridge was not a one-way street either. In fact there are some indigenous Asians who speak of a migration of people going the other way, from North America to Russia and then into Asia.

But still, the scientific community at large is very slow at accepting anything that would cast a shadow on the Bering Strait theory, as Dr. Thomas E. Lee, and Ilse Kraemer did in the 1980s.

Lee's glowing reputation was irreparably tarnished by much of the North American scientific world when he discovered quartzite scrapers and hand axes on Manitoulin Island that predated the last ice age when the land bridge was said to have been created by tectonic shift and changing ocean levels.

But among those who believed in Lee's assessment of the Manitoulin find, was Ilse Kraemer, who, as reported in last week's *Two Row Times*, discovered extremely ancient stone tools near Hagersville Ont. at around the same time as Lee was working on Manitoulin. Her finds and Lee's work told the same story. There were people living, hunting and reproducing offspring here in Ontario long before the generally accepted 12,500 year-old date attributed to the last ice age.

She contacted Lee and the two discussed their finds and became friends, especially after the backlash that came from North American scholars, anthropologists and archaeologists. Kraemer eventually went to the site and worked for a time with Lee on what is known as the Sheguiandah site on Manitoulin Island.

Upon the death of Lee in the early 1980s, the Anthropological Journal of Canada asked Kraemer to write about the Sheguiandah site and her own finds for an issue dedicated to the memory of Lee. The following is that article, edited for length.

Pleistocene Finds in Ontario

This report has been written to honour the last wish expressed to me by my dearest friend, Professor Thomas E. Lee. It is dedicated to his memory. I am confident that he would come to be seen as one of the true fathers of Ontario Archaeology. As the discoverer and researcher of the Sheguiandah Early Man site, his use of an interdisciplinary approach brought him to a conclusion apparently too far advanced for his own times, which led to his having been understood by only a few.

Some authorities still propound the old doctrine that man entered America only 12,000 years ago, after the last ice age, and that he came fully equipped with Palio-Indian tool kits. However, quite a few vastly older sites are already known, especially in the United States, but also at Sheguiandah, on Manitoulin Island. For my part, in the course of more than 25 years of persistent searching for Early Man on Southern Ontario I discovered first one, then a series of prolific sites lacking in projectile points (arrowheads). The use of the bow and arrows technology did not come until much later.

Certain physiographic features at the primary site are repeated along the escarpment on which it is found; once I had discovered this pattern I was able to find other sites, some more than 30 miles from the original discovery. Each of them supports the view that we are dealing with Early Man: there are no projectile points; the lithic technology was primitive; and the physical indications are of considerable antiquity.

The artifacts cannot be compared with any of the region's well-known conventional Indian assemblages because of their crude and primitive character. Instead, the lithic techniques used were those that have been recognized at many other Early Man sites. Some of the material can be compared directly with a number of specific lower Paleolithic cultures of the Old World. The artifacts from one part of the first site have also been identified by Professor George F. Carter as belonging to the blade-and-core tradition found at his interglacial Texas Street site (California). Although the Ontario artifacts were originally made of a pale grey local chert, the blade-and-core material is now a bright and glossy red; the resemblance to desert varnish implies high antiquity.

The sites are located on the high parts of a beautiful escarpment on southern Ontario. The Devonian limestone bedrock bears nodules of chert, and at the primary site three small prehistoric quarries show how the raw material for artifacts was obtained. There must, of course, be many other quarries at the site, since artifacts occur thickly over an area of several hundred acres around the highest outcrop. However, Early Man not only manufactured his tools here, but the presence of use-wear on the artifacts shows that he lived on the spot as well.

It is a common fallacy among conventionally trained archaeologists that Early Man sites that happen to include quarries are somehow not "real" sites. This belief probably arises from the knowledge that later Indians did travel to the sources of raw material and carried away unfinished pieces for further work. So great is this unfortunate conviction that when the crude (and fully finished) bi-faces of Early Man are encountered they are often dismissed as "blanks" and "preforms" while the core tools are "rejects".

During an extensive survey of Early Man sites in the western United States, however, Dr. Byron Sharp (1982) observed that the tools and debris of quarrying always seem to be found together, and that the tools had been used and discarded right at the place of manufacture. He contrasted this behaviour with that evident at Paleo and later Indian sites in the same areas. In a footnote to that article, Thomas Lee wrote, "The experience and astute observations of Dr. Sharp find an exact parallel in the Early Man site of Sheguiandah." Indeed, Lee (1964) has explored this issue in the article, Sheguiandah: Workshop or Habitation?"

There are also indications that the artifacts have been found in the original habitation area. The red tools, for instance, are highly concentrated in one location with the artifacts of other early cultures lying in surrounding parts of the site. But, how could the sites have escaped being destroyed by the ice of the Wisconsin (glacier), when all of Ontario seems to have been glaciated? Apparently, the location on the escarpment has something to do with it. And at Sheguiandah, Tom Lee showed conclusively that archaeological materials at his hilltop site did survive glacial activities.

The heavy reddish patina covering the blade-and-core material actually runs through a range of colours, going from the usual bright red to purple, from orange or yellow to tan or mahogany. Any given specimens, however, is usually a single colour. The tools are also glossy.

My inquiries about the red-painted cherts in Canada have been fruitless. This is not surprising, for in the years I spent searching for Early Man in Ontario, I also discovered some 950 previously unrecorded sites

that ranged through the conventional period of the province's occupation. On none of the material from Paleo-Indian to Iroquoian contact sites did I ever see even a hint of this patina. On the other hand, though, red-painted tools do seem to be connected with lower and middle Paleolithic sites all over the world (that would place the age of these tools at an astounding 100,000 years old or better).

The German Early Man scientist, Dr. A. Rust, was so fascinated by this phenomenon that he visited sites all over Europe and Asia to study it. He claimed that only artifacts found "in situ", [or, on site] and not covered by glacial drift showed red varnish. Well known examples include the Westlake and Belbex collections of Pleistocene Man's work from the Oxford area in England (Rust and Steffens 1962).

Until more recently, however, not much was known about desert varnish, but studies into its origin, especially by Professor T. Oberlander from the University of California, Berkeley, showed it to be a film made up mostly of clay coloured by iron and Manganese oxides. Working with graduate student, Ron Dorn, Oberlander in 1982, looked into rock varnishes in non-desert environments. They found that manganese-oxidizing bacteria were involved in all the diverse situations encountered. From desert environments in their area they worked out a means of dating the varnish by measuring its chemical constituents, which change over time. The results there substantiate the estimates of great age made by people like Carter. Although the method is not yet applicable to the red tool sites in southern Ontario, its implications here are clear.

The red tools are old.

Vast amounts of tools from another Pleistocene cultural phase — this one mixed — cover a sandy ridge opposite the lower area where the red tools are found. These are bifaces and they resemble the tools of the Old World Acheulean hand axe cultures of lower and middle Paleolithic times. Acheulean is divided into lower, middle and upper levels in Europe, and the corresponding categories have been recognized in Ontario material by Drs. Pittioni and Felgenhauer of Vienna University, Austria (Dr. I. Jamnik in a personal communication).

Discussion of Age and Relationship

"You apparently have most of the lithic industries represented," remarked George Carter after studying the tools. Many cultural traits that would be attributable to a wide range of Old-World Paleolithic stages and indeed found on the site. This being so, it is not surprising that resemblances can be seen between these tools and some in the Sheduiandah's level V (Thomas Lee in personal conversation), in many western Early Man sites and at early sites outside the Americas (Mueller-Karpe 1966:343).

In the Old World concept of pre-glacial man has long been established. Hundreds of sites are known, and some of these have yielded skeletal remains of Homo erectus — the species of man there associated with Acheulean cultures. Richard Leakey (1981) has commented that, "Throughout the million-year span of the Acheulean technology there was no marked refinement to be seen." In America, however, cultural stages comparable to those of the Old World are generally believed to have come much later, falling not just at the tail end of "the million-year span," but lagging behind.

In the early 1980s, Dr. Thomas E. Lee, discovered quartzite cutting tools, some of them very large presumed to be for skinning large animals like mammoths and mastodons (iPhone is included for a reference to their size). Although these tools predate the commonly accepted Land Bridge theory by tens of thousands of years, the Canadian and American archaeological brain trust rejected those estimates because they did not fit the previously accepted norm. (Photo by Jim Windle)

The Path Ahead

Even Carter's foreshortened chronology of around 10,000 years is scarcely acceptable to most Canadian archaeologists, of course, who are far more conservative than their American counterparts. Some authorities simply refuse to change their long-held opinions, and their influence weighs heavily on those who would otherwise be very open-minded towards the evidence of great antiquity.

We need to do more than just free the profession of dogmatic constraints, though. In order to find traces of Early Man, people have to be trained to see more than projectile points and other beautifully worked artifacts.

Pleistocene man's tool kit is "problematical" for conventionally trained archaeologists. Crude tools are hastily discounted as quarry garbage, blanks and preforms — an all-purpose remedy when cornered (Minshall 1979). Why are North American archaeologists not trained to recognize Early Man's tools?

Each new discovery of Early Man in America conveys the obligation to seek out further evidence; the nature of the field is such that each site is, in a way, a new beginning. Resolution of this whole highly controversial issue will open a new era in archaeology, no less in Canada than in the United States.

Continued opposition to the evidence of Early Man — opposition that crippled the work of Tom Lee and George Carter — will do more harm than that of just holding back the advance of knowledge. Many of the ancient sites are threatened by land development. Some are gone forever. Even Sheguiandah was once destined to destruction by industrial quarrying. It was saved only because Tom Lee recognized its character and then fought for protective legislation.

We cannot save what we don't know. Archaeologists must first understand how to look for Early Man sites, be able to recognize them once found, and refuse to be party to the suppression of the evidence. Most of all, cooperation is needed.

At the end of her report, Kraemer expressed her thanks and special gratitude to Doctors George F. Carter, Prof. Lee and I. Jamnik.

"Their generously given advice and encouragement has contributed greatly to the success of my research," says Kraemer.