Atlatl Dart
Radiocarbon date – c. 2000 years old

The artifact on the poster was in an old exhibit at the visitor center at the historic iron-smelting town site of Fayette located along the shore of the Garden Peninsula in Michigan’s Upper Peninsula. When the exhibit was disassembled, the artifact was sent to the Office of the State Archaeologist. The archaeologists believed it was an atlatl dart. Originally the wooden shaft was probably about four feet long. Most of the shaft was gone, but the stone point – now missing its tip – and the animal sinew and plant fiber used to tie the point to the shaft still remained. The archaeology staff wondered if it was a reproduction. Intrigued by the possibility that the item might be very old, they scraped a small sample of wood from the shaft and sent it to Beta Analytic, a radiocarbon dating lab. The lab measured the carbon in the sample. The results produced a date of approximately A.D. 20, or about 2,000 years ago. The dart was not a reproduction; it was the real thing!

The atlatl, or spear-thrower, was used in many parts of the world from 15,000 to 20,000 years ago up until just a few hundred years ago. In the Great Lakes region, hunters probably began using the atlatl around 7,000 years ago.

The atlatl is a simple tool. It is commonly a straight piece of wood roughly two feet long with a shallow groove along the length of the upper side in which to lay the shaft of the dart, and a raised “stop” at the end against which the butt of the dart is placed. The atlatl effectively lengthens the thrower’s arm allowing the dart to be propelled with much greater force than a spear can be thrown by hand. As a rough comparison, a spear thrown by hand might achieve a velocity of around 60 miles per hour. With an atlatl, a spear can be thrown at about 115 miles per hour.

What is Radiocarbon Dating?
Radiocarbon or 14C dating is a technique that can be used to determine the age of very old things that were once living. For example, some of the things that can be radiocarbon dated include seeds, wood, bark, shell, animal bone, and charred food remains stuck to the inside of an ancient cooking pot. A radiocarbon lab measures the amount of carbon remaining in a sample and uses that measurement to obtain an estimate of the age of the item from which the sample was taken.