

A Word About the Spearthrower – Part 1

For thousands of years, the people who lived in or visited the Red River Gorge used a weapon we call the *spearthrower*. They were not alone. From the Arctic to Australia and everywhere in between, people used this effective weapon to launch darts - at animals while in search of food and at other people in times of conflict.



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Spearthrower technology is impressive. It is the first true weapons system humans invented, and the one they used the longest. Spearthrowers show up first in Western Europe around 30,000 years ago. In the 1500s, when the Spanish arrived in what is now Mexico, the Aztecs were using spearthrowers. They called them *atlatls* (pronounced *at-latal*s or *atl-atls*). Kentucky's native people used the spearthrower for nearly 8,000 years, from 7000 BC to AD 700.

The spearthrower adds greater length, and therefore greater propulsive force, to the arm of the thrower. Using this weapon, a hunter could accurately throw a dart 30 to 40 yards, faster and farther, and with more power than throwing it by hand alone. This is why the spearthrower was such an excellent hunting tool and why people used it for millennia.

The Kentucky Spearthrower

Archaeologists have not found examples of spearthrowers in the Red River Gorge. However, research at Kentucky's Indian Knoll site in Ohio County provides a picture of what the tool may have looked like. This research also shows how important the weapon was to indigenous people.



The spearthrower used in Kentucky was a *composite* tool, meaning made of multiple parts. The *throwing board* was essentially a stick with a handle on one end, a weight (to counterbalance the dart), and a hook or socket on the other (see left). A 4 to 5-foot-long *dart* completed the weapon system.

The throwing board *shaft* was made of thin, flexible wood. With the added hook and handle, it measured approximately 30 inches.

The throwing board required a tight grip at the *handle*. Handles were made from paired sections of flattened deer antler tightly bound to the shaft. Or they could be flared antler bases, drilled at the base, and then fitted over the end of the shaft and held in place with asphalt.

The *weight* was a stone. The earliest examples, called *bar weights*, were flat on one side. Leather thongs held the weight tight to the shaft. Later examples, drilled, polished, and smoothed *bannerstones*, were fitted over the shaft. Native craftspeople shaped bannerstones out of granite, slate, and quartz into diverse shapes (diamond, triangular, crescent, or winged). Since any flat rock could serve as a weight, a bannerstone carried additional social and spiritual meaning.



An antler or bone *hook* completed the throwing board. Like the handle, the hook was drilled at the base and fitted over the end of the shaft.

The wood or cane *dart shaft* was likely *fletched* (tied onto the base to aid in flight) with wild turkey feathers. A cavity at the back of the dart shaft fit into the hook's *spur*. The front of the shaft was tipped with a stone spearpoint tightly wrapped into place with sinew. Native peoples chipped points out of *chert* (flint) in diverse forms. They also used bone or snapped-off tips of antlers as points, attaching them to the tip of the dart shaft with asphalt.

Different from the Bow and Arrow

The spearthrower weapons system is an angular accelerator: from the rear in an arc. A hunter can use a spearthrower one-handed. The weapon uses a heavier projectile than a bow and arrow, which can be easier to attach to a line for harpooning. It is less affected by wet conditions. A bow and arrow weapons system is a linear accelerator: from the rear in a straight line. It is easier to use than a spearthrower, and the hunter can carry more ammunition. While people commonly call spearpoints “arrowheads,” these projectiles are part of weapon that is very different from the bow and arrow.



Its Meaning

The spearthrower was essential to the survival of native peoples. Its elegant engineering ensured everyone would eat and that everyone was safe and secure.

But it was more than that. At Indian Knoll, archaeologists documented the remains of spearthrowers in graves. The wooden shafts were missing - they had deteriorated over the millennia. Only the handles, weights, and hooks were present. The placement of spearthrowers in graves suggests these weapons were prized possessions, linked to their owners. The beautiful stylized bannerstones indicate that people spent much time and great artistic energy on their spearthrowers. Visible and recognizable to anyone, some spearthrowers may never have been used for hunting. They may have functioned only as symbols - of the social order, of group identity, of the owners' status, of the owners' connections to the ancestors - in group rituals.

Today

Interest in spearthrowers is increasing today, as people explore their use in sport and in hunting. The World Atlatl Association (waa.basketmakeratlatl.com/) was formed in 1987 and holds national and international competitions. Modern hunters who use spearthrowers are part of a tool-using tradition that extends back to the very beginning of human history.