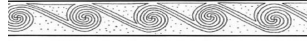


Iti Fabussa



# The awesome atlatl

## Prehistoric weapon serves hunters for centuries

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What is the oldest and most deadly instrument created long ago by Indian tribes?

Some believe that it is the bow and arrow; others believe that it is the basic spear.

However, there is a weapon older than the bow and arrow and far deadlier than the basic spear – the atlatl, a weapon capable of sending a projectile over 120 yards and killing a woolly mammoth.

Still being used by today's hunters and competitors, the atlatl has aged gracefully through the years.

Many archaeologists believe that over 12,000 years ago, hunters tracking herds across the frozen tundra of what is currently the state of Alaska became the first immigrants to enter the North American continent. These hunter-gatherers brought the atlatl, a weapon that reigned supreme among them and their descendants for thousands of years.

It was the first complex weapon system developed by humans, originating in Europe over 30,000 years ago and spreading to every corner of the globe that humans occupied. In fact, the atlatl and dart were used and improved upon for so long by our ancient ancestors that comparatively speaking, the bow and arrow can be considered a recent development in projectile technology.

So powerful and effective was the atlatl that scientists and scholars speculate that

it, along with overkill tactics, may have caused the extinction of the woolly mammoth in North America before the end of the Ice Age.

The word “atlatl” comes from Nuttall's (1891) translation of the two Aztec words, one meaning “throwing,” the other “on water.”

The atlatl is a weapon system consisting of two parts: the atlatl itself and the dart. The atlatl, generally 15- to 24-foot long, is held in the hand, and acts as a lever to propel the dart with more force. It resembles a short stick with a spur at one end that fits in the base of the dart. The atlatl can be made completely of wood, bone or both and some may incorporate weights made from stone or shell.

The darts may be far more complex. They can be constructed from numerous types of wood or rivercane and resemble a large arrow. There are two different types of atlatl darts, compound and self. “Compound darts” have detachable foreshafts, allowing points to be quickly replaced for a quick reload. The other type of dart is the “self dart.” It, unlike the compound dart, does not disconnect at the foreshaft. Atlatl darts are generally 3/8 inch to 1/2 inch in diameter, 4- to 6-foot long, and can reach up to 100 miles per hour when thrown by an atlatl.

The mechanical foundation of atlatl technology is the flexible dart. Under acceleration by the atlatl, the dart flexes and compresses like a spring. Spring energy pushes the dart itself away from the atlatl and launches it at velocities that easily exceed 100 miles per hour. Instead of throwing a dart 30 or so yards, the maximum obtainable with an unaided arm, the atlatl will allow an average person to throw the dart 90 yards; and a gifted thrower 125 yards, or more.

The first of many improvements to this mechanical system was the implementation of multiple length atlatls to fine-tune



Photo provided

**David Batton, holding atlatl, dart and detachable foreshaft.**

the device. Longer atlatls tend to increase the range of the dart. This particular invention allowed the user to hit targets over 100 yards away.

To date, the world's farthest recorded throw using traditional materials is 252 yards (230.48 meters) by Ilkka Kontinaho from Finland, using a 30-inch birch atlatl and a 58-inch, 86-grain wooden self dart.

This throw was accurately measured and was in the presence of law enforcement with a dense crowd and was presented to the Guinness Book of World Records, but as Dave Engvall's synthetic atlatl distance record still stands some 20 yards further, they declined. Given that Ilkka threw the present primitive world record into a side wind, and it was his last throw after hours of chucking spears, it is only a matter of time until probably he surpasses Engvall's long-standing record using plain ol' sticks.

Although largely replaced by the bow and arrow in North America around the time of the birth of Christ, the atlatl is still being used by a few Native Americans

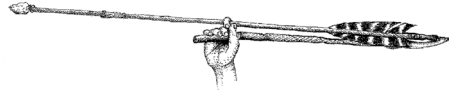
during the Age of Discovery, 500 years ago.

When Columbus encountered natives using the atlatl during his voyage to the New World, Europeans who had long forgotten the weapon soon became familiar with it again. These encounters were certainly with the business end of the weapon – leaving a European wondering, “What was that?” just before dying.

Experiments conducted in March of 1978 by Dr. Dennis Stanford, chief national archaeologist at the Smithsonian and a primitive technologist, have demonstrated that without an atlatl, the stone-tipped spear could only penetrate three inches into an elephant carcass, but with the atlatl the spear could penetrate about half the depth of an elephant’s chest cavity, enough for a sure kill.

The debate has never been centered on the killing power of the atlatl, but with weights that some believe may have been tied onto the atlatl.

There have been many theories over how these weights may have been used, including the ideas that they increase the efficiency of the transfer of energy from the atlatl to the dart, as a silencing device, or



**Drawing of an atlatl and dart, by Ruby Bolding.**

as a counter balance that makes it easier to hold the dart in a throwing position for an extended period of time.

To date, definitive evidence does not exist to suggest one of these uses over the others, but some modern practitioners do use atlatl weights, claiming that the weights provide one or all of these benefits.

Today, atlatls are primarily used in two different ways, hunting and competition.

The legality of atlatl hunting differs from state to state. Some states place restrictions on what type of animals may be hunted or fished. Oklahoma, Kansas and Texas allow atlatl hunting and fishing with certain restrictions.

The International Standard Accuracy Contest (I.S.A.C.) organizes many of the atlatl competitions in the United States. There are two different types of classifica-

tions established by I.S.A.C., primitive and ppen.

For primitive equipment, both the atlatl and the darts must be made of natural materials that would have been available to prehistoric people. The open class is any type model or design of the atlatl as long as they follow the standard length, weight and diameter.

The World Atlatl Association (WAA) publishes information about events and competition results, archaeological finds, scientific information, reports, cartoons, and just about anything else that is related to the atlatl as a primitive weapon or contemporary sport, though they do not set the rules and regulations for competition.

The atlatl has aged relatively well over the years. Standing as the oldest and most powerful weapon of our ancestors, it has changed little over the years, and is a great legacy of the early Indian tribes.

From hunting to competition, the popularity of the atlatl is increasing, and the use of the device may again soon span across the entire world.

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