

## Glimpses of Prehistoric America

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## PROJECTILE POINTS

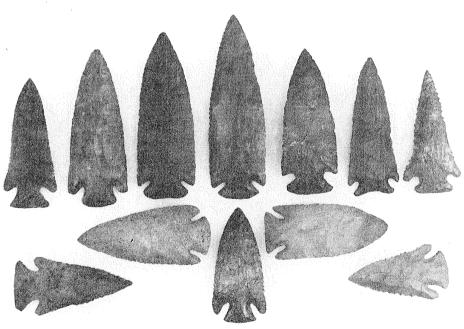
By Douglas Orr

Projectile point construction depends on the equipment that is used to launch it through the air. So, the larger the point the larger the equipment. In North America, projectile points had three "launchers": the spear, atlatl, and bow and arrow.

North American Prehistory begins *circa* 11,500 B.P. (years before the present) with large projectile points that range from 5 centimeters to over 20 centimeters in length. These projectile points are commonly called the Clovis, Eden, Scottsbluff, Plano, and Folsom points after the sites where they were first found. These points are heavy and could only be used with spears in the killing of bison, mammoth, sloth, and other large animals.

Large projectile points never ceased to be made and used in North America, but are seen less frequently in later periods.

At about 8,000 B.P., a new technology called the atlatl enabled smaller points to be used. The atlatl (an Aztec name) is a spear thrower which allowed large animals like deer or antelope to be hit at 100 yards. It was usually a composite object, consisting of a springy wooden shaft about two feet long, fitted with a tough hook of antler, often with a weight mounted toward the center of the shaft (for balance or better whip action), and a shaped handle or grip with finger loops. The spear thrower is in itself an important technological advance. With it, the spear can be thrown farther and with greater accuracy than is possible with the unaided arm.



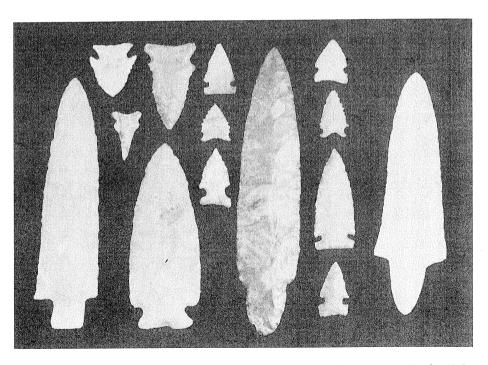
Bimbo Kohen

The bow and arrow, which uses the smallest of the points, is thought to have come into use around A.D. 750. For a point to be used on a bow and arrow, it must weigh less than 3.5 grams, and many average 1 to 2 grams. If a point heavier than this is put on an arrow, it falls to the ground too quickly after release from the bow.

Projectile points are made out of any rock that has the ability to flake in a predictable manner. The most highly prized substance for projectile point manufacturing is obsidian, a volcanic glass with a very predictable break pattern and razor sharpness. Quartz, basalt, chert, flint, and jasper are some of the other common materials used for points.

Projectile points are basically made by carefully hitting a rock, of the material mentioned above (called a core), carefully at a proscribed angle with another rock (usually of a harder material) called a hammerstone. After a thin flake is obtained from the core, it is further worked into the shape of the point type desired. A piece of wood or bone, called a soft hammer, is then used for the fine finishing touches on the projectile point.

The diagnostic part of any point is the base. It is from the shape of this section, and the accompanying notches and tangs, that a temporal and areal placement can be made.



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