Iti Fabussa



Figure 3: Heat-treating process as described in text, moving from left to right and top to bottom.

Imagine yourself

brought news that

a powerful, foreign

army is on the

Making a Choctaw stone arrow point



Figure 1: Madison points made by ancestral Choctaw people at the Lubbub Creek site, Pickens Co., Alabama.

march and will be moving into the area within a few days. Your heart thumps, as your mind races over stories that have been circulating in for months now from the communities to the east, through which this army has already passed. The soldiers have hairy faces, ride giant deer-like animals, wear metal armor, and carry weapons that shoot fire and sound like thunder. These people have been named "na hollo," or "something powerful/holy," because of their foreign technology, but they have proven to be as treacherous as they are merciless. They have looted, destroyed towns, enslaved and murdered countless civilians, and defeated every fighting force that has opposed them. The messenger has also brought a request from Chief Tvshkalusa for warriors to join him at the town of Mabila to boldly face this invading army. As a Choctaw man, it is your duty to give all that you have, including your life, to protect your loved ones. What do you do? It's probably time to get your weapons in order.

In this month's edition of Iti Fabvssa, we will look at how Choctaw people made their stone arrow points. Most of the stone points used on Choctaw arrows are small, triangular-shaped, and have a concave base (Fig. 1). They are of a type, known to modern collectors and archaeologists as "Madison points." Over an 800year span, between AD 900-1700, Madison points were the

"business end" on the Choctaw arrows that were specifically intended for war or for hunting big game. These same points tipped many of the Choctaw arrows used against Hernando De Soto's army in the Battle of Mabila in 1540.

Ancestral Choctaw people used several different types of rock for making chipped stone arrow points (see Iti Fabvssa 7/11). All of them are more or less flint-like, meaning that they break with a conchoidal fracture, like glass. This glass-like quality makes it possible to consistently chip them into sharp-edged implements and weapons. In the northeastern part of the Choctaw homeland, one of the stones most commonly used for making arrow points

was Tuscaloosa chert. This stone was picked up from gravel bars along the Tombigbee River. In its natural form, the stone is yellow or brownish, and pretty tough. Thousands of years ago, ancestral Choctaw artisans learned that they could change the properties of this stone by carefully exposing it to just the right amount of heat. Heat-treating makes Tuscaloosa chert more brittle and glass-like, and a better raw material for making arrow points. It can also permanently transform Tuscaloosa chert



Figure 2: Tuscaloosa Chert cobble. The portion at the right is natural stone, the red portion at the left has been heat-treated.

from its natural yellowish color to a blood red (Fig. 2). The significance of this color change was certainly not lost on Choctaw people, who associated the color red with war and warriors.

For heat-treating to bring about the desired changes, heat must be applied in just the right way, and in just the right amount, otherwise, it may have no affect on the stone, or may even destroy it. Experiments have shown that Choctaw artisans heat-treated Tuscaloosa chert to around 1000 degrees Fahrenheit (Ensor



Figure 4: Traditional flintknapping tools



Figure 5: Stages of producing a Madison point described in text

1981:84) before chipping it into Madison points. One traditional method of heat-treating is depicted in Figure 3. First, a pit is dug in the ground, and a fire built in it. After the fire burns down to coals, the coals are covered with dry sand. The stone to be heattreated is arranged on the sand layer, and then covered with more sand. Another fire is built on top and allowed to burn for several hours. The heat-treated stone is dug out of the sand a day or two later, after it has cooled.

Today, a widespread misconception is that Native Americans made stone arrow points by dripping cold water on hot rocks to fracture them. This technique was sometimes used to break large stones into smaller pieces, but the breaks happen too randomly to be used to make a complex implement like an arrow point. Stone arrow points were and are made through a process that is known as "flintknapping" in English.

Through flintknapping, an artisan takes advantage of the conchoidal fracture of the stone. By applying force in just the right places, it is possible to chip and shape the stone in a desired manner. The flintknapping process can be complex and it takes many years to master. Even a fraction of the techniques and variables involved could not be fully described here, but several excellent books exist on the subject (Callahan 1979; Patten 1999; Waldorf 1994; Whittaker 2000).

Let us return to the young Choctaw man preparing to face the invading army. He picks up a flat, red cobble of heat-treated Tuscaloosa chert (Fig. 4a) to make a Madison point. First, he uses a hammerstone (Fig. 5a), to chip the rounded edges of the cobble into acute angles. He grinds these sharp edges on a piece of sandstone (Fig. 5b) to make them duller and stronger. Next, he picks up the rounded base of a deer antler (Fig. 5c), and strikes it against selected portions of the cobble's prepared edges, driving off long, thin flakes, across the surface of the stone (Fig. 4b). Over the next few minutes, the sequence of preparing the stone's edges and driving off flakes is repeated many times. Soon the stone, now called a "perform," has become thin and roughly triangular-shaped (Fig. 4c). The man now picks up a deer antler tine in a wooden handle (Fig. 5d), pushes its tip against the edge of the perform, and removes a small, narrow flake. The antler tine is used to remove dozens of small flakes that shape the Madison point into its final outline, make its edges even, and give it a cross section that is relatively thick in the middle and thin and sharp on the edges. Finally, the man picks up a tool made from a deer ulna (Fig. 5e) and uses it to remove tiny, tiny flakes from the cutting edges of the arrow point. These give the finished point (Fig. 4d) fine serrations and make it ideal for slicing through the flesh and creating a bleeding wound.

Until 250 years ago, making a stone arrow point was a skill that nearly all Choctaw men had to develop. These points tipped arrows that would feed their families and protect them from their enemies. They had to be made correctly. On October 18, 1540, at the Battle of Mabila, ancestral Choctaw warriors stood boldly against De Soto's army, filling the air with stone-tipped arrows, and inflicting 688 arrow wounds on his armored soldiers. That day, the Choctaw warriors gave all they had, including their lives, but they could not quite win the battle. However, the bravery of the Choctaw people and fierceness of their arrows demoralized De Soto's force, and the invading army soon left the area.