

Hammer & Pecking Stones

By Frank and Nancy Hoff

Published by Pasttime Artifacts

Article can be republished in whole or part.

Permission from the authors and recognition of source required.

For years my wife and I have been interested in lithic tools. Sure, we share the same awe and excitement in finding a fine point. However, points are basically spent bullets, while tools were the building blocks to make more “bullets”. Many tools appear crude with little regard to shape form or function. However, when placed in your hand you start to realize how uniquely they were formed. Recently we purchased several West Florida hammer stones and after looking through our collection, found several others. Examination of the pattern of manufacturing revealed several important and consistent features.

There are many kinds, shapes and weights of hammer stones. Holmes (1919) writes about the Flint Ridge quarries in Ohio: “many of the larger specimens (hammerstones) used in breaking up the flint weigh as much as 50 pounds, while the smaller, with which the finer shaping work was done, are not larger than walnuts.” Typically they have obvious battered surfaces. Primary hammer stones are usually made from large, dense, heavy stone. Less dense stones were typically selected to remove large primary flakes struck from a single “core or spall”. Hammer and pecking stones were deliberately modified to aid in comfort and ease of control. Pecking stones were used for direct percussion “shaping” and secondary flaking of the tool being created. Final shaping or sharpening was done by grinding and/or fine chipping using softer stone or bone tools.

There was a distinct desire to firstly utilize naturally formed stones which needed little modification. However, these stones were often modified so they would fit comfortably into your hand to maximize finger grip, control and reduce percussion shock.

Type “A” was formed with a flat base allowing it to rest comfortably in the palm of your hand (Figures 1, 2 & 3). The palm serves as a cushion that resists the shock of smashing a stone against another stone (Figures 2B & C). However, placement of the fingers is not just random but planned by the removal of specific areas which comfortably accommodates the thumb and other fingers (Figures 2 A & B). By rotating the stones in your hand you will

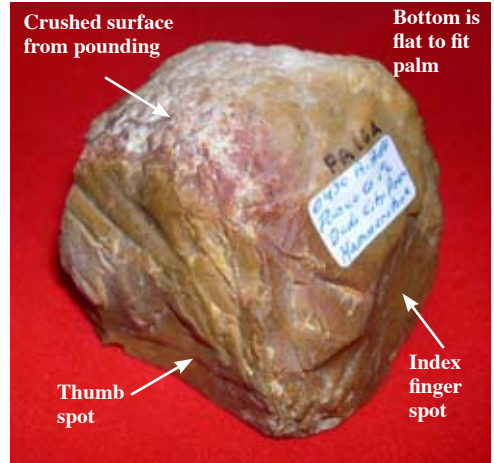


Figure 1 - Type “A” hammer stone 0430 (7.1 cm maximum width x 5.8 cm high, weight 350 gm). Made from fossilized coral nodule, Pasco Co. FL

find a position that is the most comfortable. After positioning, examine the chipping patterns and you find special areas for the thumb, the index finger and at times other fingers. The width of the stone is not overly wide and fits nicely into the hand.

Type “B” hammer stone is basically naturally shaped with little modification and limited use. As opposed to Type “A” these stones rest on the palm pads just below your index and second fingers and the thumb rather than the entire palm. This example shows limited use, but as it wears from use it would be modified for comfort.

Type “C” is like Type “B” but has been modified into a pounding point on one end and a wide hammering area on the other. Like Type “B” they rest in the front finger region. Based on the weight and shape this is like a transition hammer which could be used for gross and finer chipping.

Type “D” are pecking hammer stones that follow the same basic form of



Figure 2 - Type "A" hammer stone 0880 (7.0 cm maximum width x 5.5 cm high, weight 295 gm). Made from fossilized coral nodule, Pasco Co. FL

Type "C" except they are significantly lighter and smaller. These barely rest on the index palm pad but fit further up under the joint of the index finger (Figure 6B) or just in the finger tips with limited pad support like the small example in Figure 6A.

Type "E" Wheel or roller hammer stones are unique in that they are shaped like a wheel with central depressions on one or both sides. When used they may not rest on the index and second finger pad depending on the wheel diameter and perhaps whether



Figure 3 - Type A Hammer stone 0881 (7.2 cm maximum width x 5.7 cm high, weight 300 gm). Made from fossilized coral nodule, Pasco Co. FL



Figure 4 - Type B hammer stone 0882 (5.0 cm maximum width x 7.4 cm high, weight 310 gm). Made from fossilized coral nodule, Pasco Co. FL

or not they were being used as a hammer or pecking stone. Typically they are often referred to as nutting stones, grinding stones and discoidal stones. Actually these may indeed be a universal tool that eventually encompasses all four at functions. Obviously after considerable use the end result may have been a discoidal or game stone. No doubt many of these were basically round shaped river rocks that were converted into these wheel-like tools. Wheel stone are more common in areas where pecked and polished celts, axes and similarly made tools and hard nuts are available. We have several of these from an auction and we have collected but will constitute a future article which will titled "Discoidal, Nutting Game and/or Hammer Stones?".

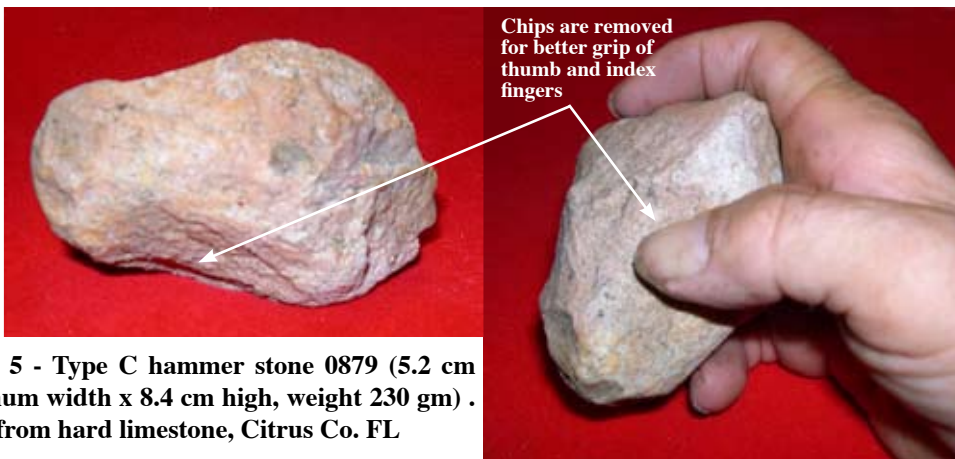
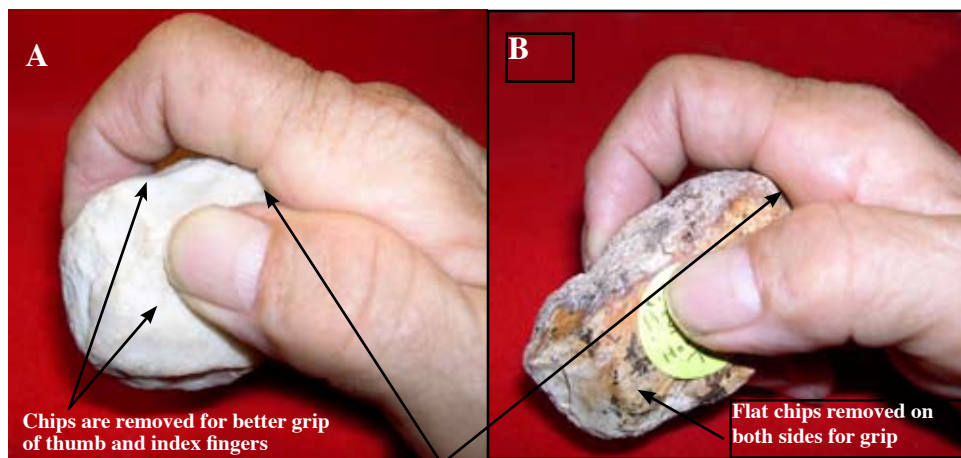


Figure 5 - Type C hammer stone 0879 (5.2 cm maximum width x 8.4 cm high, weight 230 gm) . Made from hard limestone, Citrus Co. FL



Stone rests on palm pad of the index and second finger

Figure 6A & B - Type D pecking/hammer stones. "A" (0883) (4.3 cm maximum width x 4.9 cm high, weight 90 gm) Made from fossilized coral nodule, Pasco Co. FL. "B" (0884) (4.0 cm maximum width x 6.6 cm high, weight 100 gm) Made from hard limestone, Citrus Co. FL.

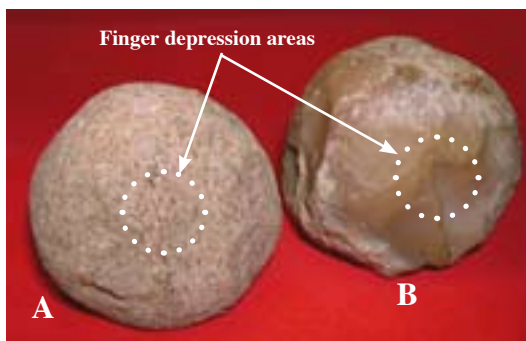


Figure 7A & B - Type E pecking/hammer stones. "A" (0883) (6.1 cm maximum diameter x 3.6 cm high, weight 190 gm). Made from hard granite, Jackson Co. IN. "B" (0429) (7.0 cm maximum diameter x 5.9 cm high, weight 370 gm). Made from fossilized coral nodule, Pasco Co. FL.

References:

- J. D. Mc'guire (1891).** The Stone Hammer and Its Various Uses. *American Anthropologist*, Vol. 4, No. 4, pp. 301-312
- Holmes, W. H (1919).** "Flint Ridge and Warsaw Quarries, Ohio," *Handbook of Aboriginal American Antiquities*, Part I Introduction.
- Peter A. Bostrom (2007).** Web site <http://lithic-castinglab.com/index.htm>