

UP FRONT



MEADOWCROFT

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The Real Paleo Diet: What's for Prehistoric Dinner?

If you wait long enough, just about anything can come back into fashion. While I am hopeful that leisure suits and bell-bottoms will never make the return trip from the 1970s, it's interesting to know the cuisine of our hunter-gatherer ancestors has made the long journey back from prehistory. The Paleolithic Diet or Paleo Diet is a current movement to return prospective dieters to a dinner plate absent of such things as processed foods, cereal grains, and fare laden with trans-fat. In essence, this diet seeks to mimic the meal plan of those who subsisted on fish, wild game, and the collection of native plants, fruits, and nuts before the advent of agriculture. An Internet search of the term "Paleo Diet" reveals much discussion, on both sides of the argument, regarding the efficacy and health benefits of this dietary plan.

When it comes to understanding the actual diet of prehistoric people, archaeological evidence from the Meadowcroft Rockshelter has contributed a great deal of information. The 956,000 animal remains and the 1.4 million plant remains recovered from the site provide evidence of the floral and faunal species that have been present at the site over the past 16,000 years. This evidence also provides clues about which plants and animals

may have made it onto the paleo dinner plate.

Many of the edible fruit, nuts, and plants that appear in the archaeological record at Meadowcroft are still found on the property today. However, curiously absent from Meadowcroft's modern landscape, except where reintroduced, is the Common Hackberry tree (*Celtis occidentalis*). Hackberry seeds make up the largest portion of probable human food items from the site, with the earliest samples found in layers dating to 7000 B.C. Largely used as ornamentals today, hackberry trees produce a quarter-inch size fruit with thin, sweet tasting flesh. The large, hard seed is rich in protein and fats and may be crushed and eaten with the entire fruit.

Seeds from common indigenous fruits such as blackberries, raspberries, and cherries were recovered from multiple layers of the site dating as far back as 9350 B.C. Evidence of grapes was recovered at Meadowcroft from as early as 980 B.C. Paw paw trees (*Asimina*

triloba) still produce their unusual fruit at Meadowcroft. The earliest paw paw seeds recovered from the Rockshelter were found in a layer dating to 340 B.C. The oblong, cylindrical fruit is the largest edible native fruit in North America, sometimes attaining a length of six inches. The soft, custard-like flesh has a distinctive flavor, described by some as resembling a mix of banana and mango.



Wild grapes are as plentiful at Meadowcroft today as they were thousands of years ago.

All photos by Dave Scofield.



Food is prepared at Meadowcroft's American Indian Heritage Weekend held each September.

Nuts, an important source of energy and nutrients, were also a food source for the prehistoric people who camped at the Meadowcroft Rockshelter. Shell evidence of walnuts, hickory nuts, and acorns was recovered from the site with the earliest samples of each dating to 14,225 B.C., 12,975 B.C., and 7165 B.C., respectively.

Eastern Red Bud trees, which debut in the Meadowcroft archaeological record in 1260 B.C., represent another probable food source. The beautiful pinkish-purple blossoms are sweet to the taste and contain assorted vitamins, minerals, and antioxidants. The seedpods produced by these trees are also an edible source of protein.

Edible seeds from chenopods (also known as the goosefoot family) were present at Meadowcroft in increasing numbers since 1000 B.C. As these plants are commonly associated with disturbed land, it stands to reason that their population would grow simultaneously with the development of agriculture, which occurred about that time in the upper Ohio Valley.

As agriculture took hold, domesticated crops became staples in the diet of prehistoric people. Remains of corn (perhaps discouraged by modern paleo dieters) and squash were

recovered from the Rockshelter. The oldest carbonized corncob was dated to approximately 375 B.C., making it the earliest corn sample recovered in eastern North America. Squash seed samples were recovered with an associated date of approximately 1115 B.C.

In addition to intensive foraging and eventual agricultural practices, the prehistoric people who used the Meadowcroft Rockshelter also fished, hunted game animals, and collected food items such as fresh water and terrestrial mollusks, amphibians, and bird eggs. The remains of certain game animals recovered at Meadowcroft (white-tailed deer, elk, turkey, and ruffed grouse) reveal butchering marks from flint knives, conclusive evidence that these animals were included on the menu. While no butchering marks were found on the vast collection of passenger pigeon bones from the site, the volume of bones (over 7,000) and the historic documentation for the human consumption of these extinct birds makes them a likely food source. A fragment of a fishhook, manufactured from the cannon bone of a white-tailed deer, indicates that fish were probable menu items as well.

For those who are tempted to think of the paleo diet as bland, prehistoric diners returning from a visit to the Meadowcroft

Rockshelter probably would have cached escargot in their prehistoric doggy bags. Sixteen species of land snails were identified in the archaeological deposits. A majority of these species were represented in each of the strata associated with a human presence. Freshwater mussels were collected locally from Cross Creek and from the Ohio River. Eleven species were identified in the Meadowcroft collection with nearly 80 percent of the samples recovered from layers dating between 1260 B.C. and 340 A.D.

Rounding out the menu, and representing evidence of other possible food items found at the Rockshelter, are scant examples of bird eggshells and bones from an unusual and very large (up to 20 inches long) aquatic salamander known as the hellbender (*Cryptobranchus alleganiensis*).

The Meadowcroft Rockshelter is a remarkable archaeological site. The evidence uncovered beneath its sandstone overhang provides us with a small glimpse of everyday prehistoric life. By looking at the food evidence left behind by people who camped there thousands of years ago, we are connected to them by the most basic of human activities. Bon appetite! 🌞



Paw paw trees produce the largest edible native fruit in North America, and are today hand-pollinated by Meadowcroft staff.



The edible pods of the Eastern Red Bud trees found at Meadowcroft.



Hickory trees provide nuts at Meadowcroft just as they have for at least 15,000 years.