

A Bone Flute from Angel Site

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During the 1947 digging season at Angel Site, Vanderburgh county, Indiana, a perfect bone flute was uncovered. In previous years, fragmentary flutes have been found at this site but, until now, none in perfect condition.

Before I describe this flute, I would like to state that in American archaeology, the terms "flute" and "flageolet" have been used interchangeable, with a majority of workers tending to favor the term "flute". This is regrettable for, in a technical sense, flageolet more readily describes the instruments in question. We think of a flute as an instrument that is blown while held with its long axis at right angles to the lips, and a flageolet as one that is blown with the long axis in line with the lips. The Indian "flute", insofar as I can determine, is blown with the long axis in line with the lips and thus, would technically be a flageolet. Since the more widely accepted name now in use is "flute", I shall refer to these instruments as flutes throughout this paper.

The Angel Site flute was uncovered in the village debris at the 1.2' to 1.6' level. The bone from which it was fashioned has been tentatively identified as the leg bone of a large wading bird, one of the herons or cranes. This flute has a total length of four and one-eighth inches with a mean outside diameter of five-sixteenths of an inch and a mean inside diameter of four-sixteenths of an inch. Along its length are seven perforations which average five-sixtyfourths of an inch in diameter and one-fourth inch from the center of one perforation to the center of the adjacent perforation. Five of these perforations are oval and two are round. The oval perforations vary so little from the round that I feel justified in terming all perforations round.

The tonal qualities of this specimen fall in the second octave above middle "C" and approach the pentatonic scale. This is probably accidental, for primitive instruments are made to no set standard and the tones produced vary with each instrument. This is corroborated by Roberts who states:

"even among primitive tribes where instruments such as flutes capable of producing several tones are common, it is a matter of repeated observation that the instruments vary considerably from specimen to specimen in actual scales achieved." (1)

Flutes of this type have been found at many sites throughout the country. Hooton and Willoughby describe a find made at the Madisonville Ohio site in great detail. They say:

"About twenty of the flute-like objects of the type shown in plate 15,d, made from the long bones of birds, were found during the explorations by the Museum. They are mostly small, and judging from the unbroken specimens recovered the number of finger holes range from five to nine, the usual number being five or six. The holes are commonly about one-half inch apart, but in one specimen the centers of the perforations are placed about one-fourth inch from each other, too near, it would seem, for its successful manipulation by the fingers of an adult." (2).

This description, in nearly all respects, describes the Angel Site flute.

Other bone flutes are reported from the excavations at Pecos (3), from among the Caddo (4), from the Archaic and Late Prehistoric patterns of New York State (5), and from the Fort Ancient aspect of Ohio and West Virginia (6). These flutes are in most respects similar to the Angel Site flute.

Another type of flute found in North America is that made of reed or cedar. Archaeologically, in this area, only bone flutes are found; and I mention flutes constructed of other material only because they were, in all probability, a part of the cultures that produced the bone flutes.

Bibliography

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