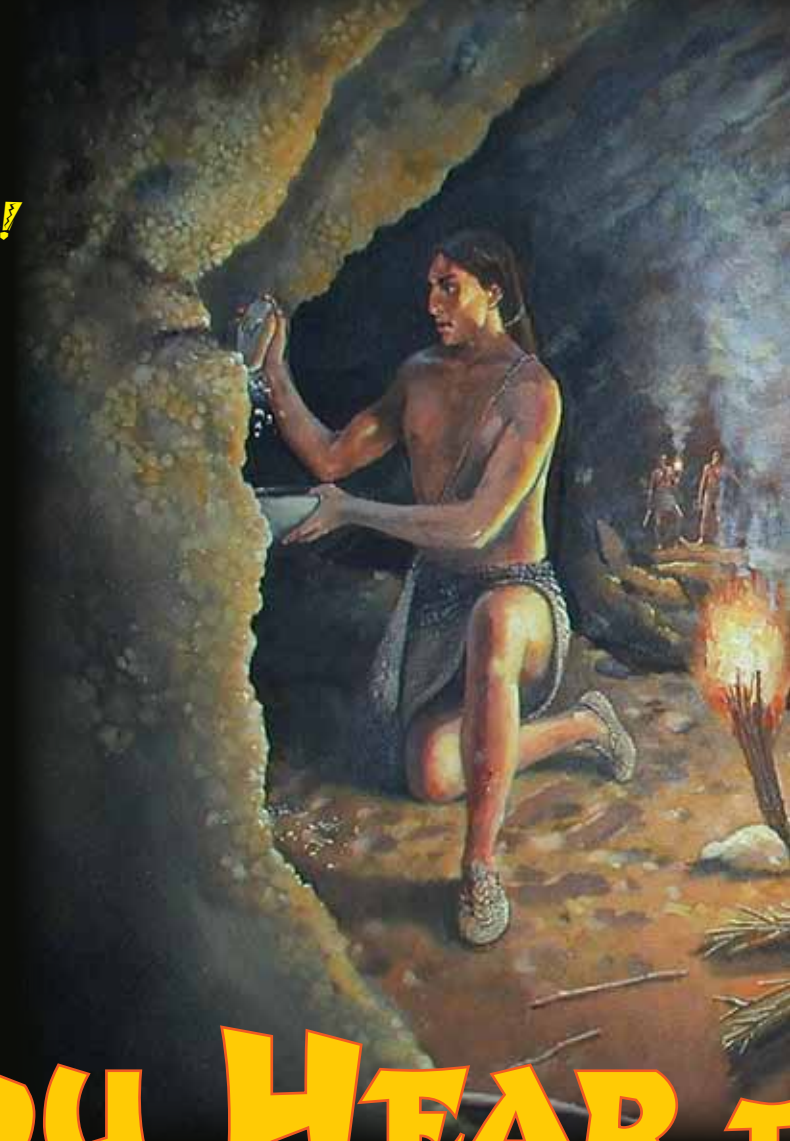
Blow! Shake-Scrape-Strike!
Can you hear the past?

Shrill high notes soar as voices chant. Feet shuffle to the rhythm. Sush-shush, sush-shush. Scrichy-scratch. Bum-bum-bum...BUM!

Flutes and panpipes.
Rattles, rasps, and drums.
Blow! Shake-Scrape-Strike!



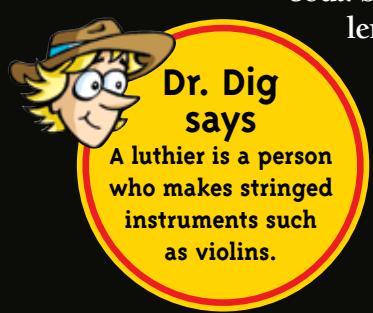
Can You Hear T

That's how prehistoric people in North America's Eastern Woodlands made music for their dances and for their ceremonies. It is music long before a violin was even a murmur in a luthier's ear.

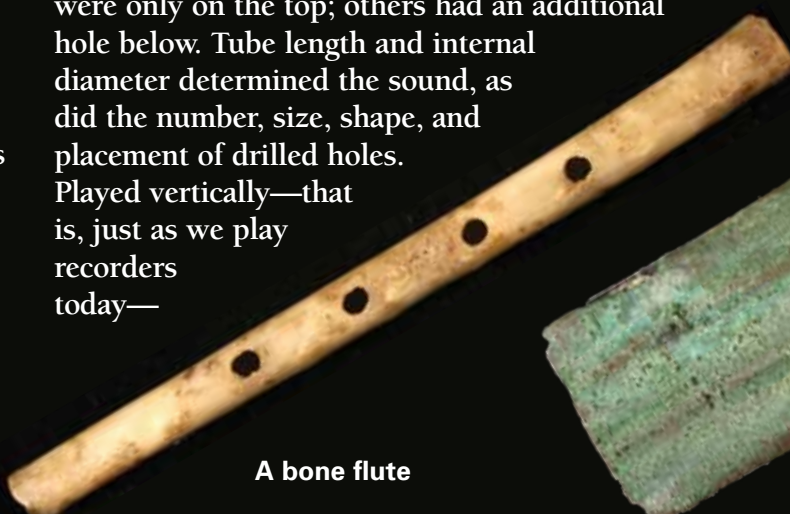
Blow!

Direct your controlled breath across the end of a tube—much like blowing across the top of a glass soda bottle. Change the tube's length, and you change the pitch. It's music!

Ancient woodwind instrument makers cut and scraped out tube-shaped segments of wood, river cane, reed, or bird bones for their flutes and panpipes. Flutes were single tubes and came in many sizes: between 3 and 12 inches or more. Flutes could have one or as many as eight rectangular, oval, or round holes. The holes on some flutes were only on the top; others had an additional hole below. Tube length and internal diameter determined the sound, as did the number, size, shape, and placement of drilled holes. Played vertically—that is, just as we play recorders today—



Dr. Dig says
A luthier is a person who makes stringed instruments such as violins.



A bone flute

Just imagine this scene in the Eastern Woodlands—Mammoth Cave in south-central Kentucky, to be exact—some 1,700 years ago. These men would have known well the instruments we talk about in this article. Perhaps they even danced to them!

BY A. GWYNN HENDERSON

THE PAST?

these prehistoric flutes produced high-pitched, shrill, whistle-like musical notes.

Prehistoric peoples of the Eastern Woodlands made and used flutes for millennia. They played panpipes, however, only from 150 B.C. to A.D. 500. Their panpipes were similar to those of Central and South America, but the way they made them was unique.

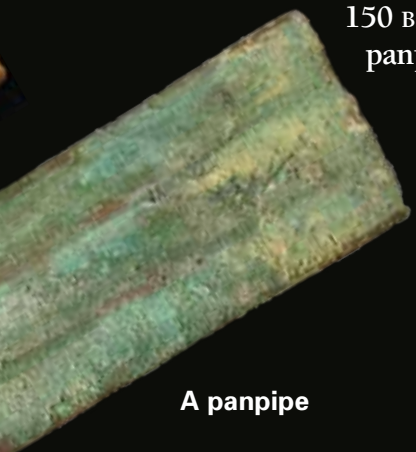
A panpipe usually consisted of three or four bone or cane tubes of the same length (anywhere between three and eight inches long). What determined the tube's pitch was a wooden stopper or plug that was fitted inside it. A short plug and longer tube produced a lower note; a long stopper and shorter tube, a higher note. Each tube had its own separate shiny copper or silver jacket. Loose fibers or yarns packed around the tubes held them in place. Cord tied the jackets together. A panpipe with three tubes produced three different pitches. When played, regardless of how many tubes there were, panpipes made very high-pitched, musical notes that were much like "single-tube" flutes.

Shake-Scrape-Strike!

Move your hands rhythmically. Shake a container barely filled with small pebbles. Scrape a stick across an uneven surface. Strike a skin stretched tight across a hollow space. It's music!

Ancient percussionists used wood, river cane, animal skin, animal bones, gourds, clay, and even tiny pebbles to make their rattles, rasps, and drums.

A box turtle's shell made a good rattle. After cleaning out the former occupant, the instrument maker put 20 to 50 small,



A panpipe

The top and bottom of a turtle shell with the pebbles that would have been placed inside the two sections

carefully selected milky white quartz pebbles inside the carapace (the curved part), replaced the plastron (the bottom part). He then stopped-up all the head, leg, and tail holes. A wooden handle was slipped through a hole drilled through the center of both parts. Then the entire instrument was tied together with cord. The pebbles made the sound when the player shook the rattle.

A rasp could be made from wood, river cane, or a rib bone of a large animal—a deer, for example. Rasp makers cut a series of notches or grooves into one or both of the bone's flat sides using a sharp tool, such as a stone knife or scraper. Rasps made scritch-scratchy sounds when players rhythmically scraped a bone or stick back and forth across the grooves.

Archaeologists have not found drums in the region's prehistoric sites. That could be because drums were made of perishable materials or because drums may be hard to recognize in the archaeological record. However, the earliest Europeans to visit the Eastern Woodlands saw native peoples playing drums. Some were small water drums, made from wooden or ceramic pots about six inches around and 10 inches tall. As the name implies, a drum maker filled the container with two inches of water before stretching an animal skin drumhead over the top of the vessel. Drummers used a stick to play these instruments.

A rasp

Few Chances Here

Many of these instruments have deep historical roots. Some types of flutes and turtle shell rattles were made as early as 3000 B.C. It is clear from the places archaeologists have found many of these instruments that they were sacred objects, likely used during important ceremonies and rituals.

The forms of these sacred ritual objects have remained remarkably consistent over thousands of years. Many of the traditional musical instruments used today during dances and ceremonies by the descendants of the prehistoric Eastern Woodlands peoples are similar to those used by their ancestors.

Flutes. Rattles. Drums. Blow! Shake-Strike!

Music at the Post Office

Music is everywhere—even at the Post Office. Through the years, governments have honored musicians by featuring them on postage stamps. Here's one that honored Francis Scott Key. For more, go to the *DIG* Web site at: *www.digonsite.com*

During the War of 1812, Francis Scott Key (1779–1843) witnessed the 25-hour bombardment of Fort McHenry from a British troopship anchored some four miles away. On September 14, 1814, as the dawn revealed a flag flying over the fort, Key began jotting down the lines of a poem, which he called *The Defense of Fort McHenry*. Shortly after, the name was changed to *The Star-Spangled Banner*. In 1931, it became the national anthem of the United States.

A. Gwynn Henderson, ***staff archaeologist and education coordinator at the Kentucky Archaeological Survey, loves to sing. For this article, she consulted with music archaeologist*** **Mark Howell,** ***musicians*** **Vicky Middleswarth and Linda Henderson-Price, and** ***Shawnee language teacher*** **Ben Barnes.**

Sing!

by A. Gwynne Henderson
illustrated by Lisa Fields

What prehistoric instrument leaves no trace in the ground, yet, every day, we hear the music it makes?

If you said the human voice, you're right!

Archaeologists are sure that prehistoric Eastern Woodlands people made music with their voices. The Cherokee, Shawnee, and other descendants of these ancient Native Americans sing lullabies to their babies, love songs to their sweethearts, and praises to their gods. Who knows how old those melodies might be?

Singing has always helped people—both now and in the past—remember and understand important words and ideas. You have probably done this yourself many times as you have sung your ABCs.

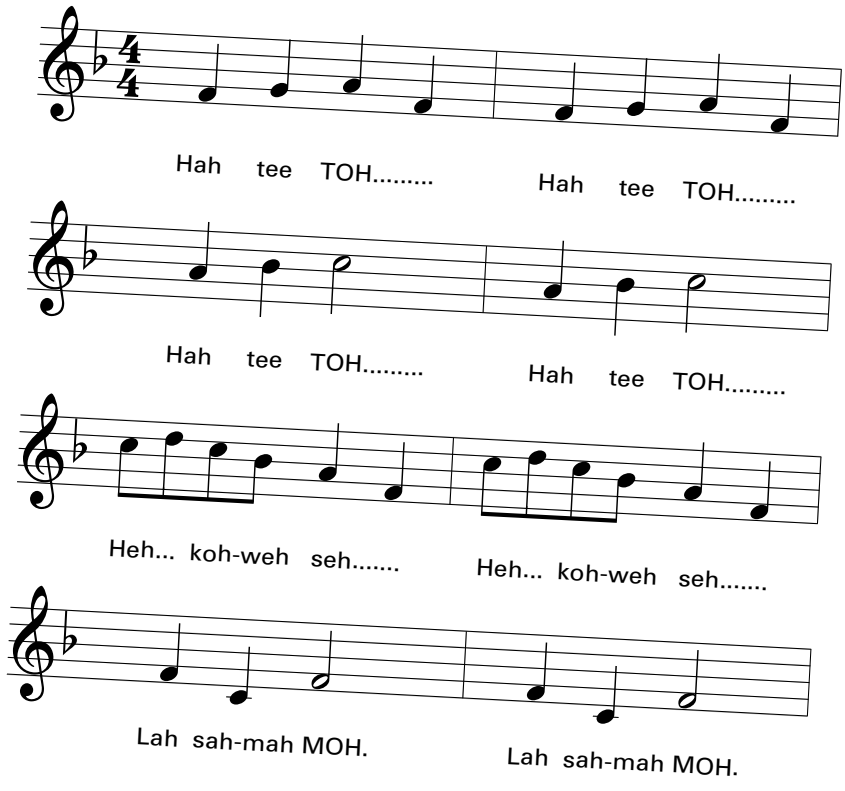
The Shawnee people, who today are living in Oklahoma, are in danger of losing their native language. Using songs, they are teaching their young people important phrases. One teacher, Ben Barnes, uses the traditional round *Frere Jacques* to help his students learn how to say "Hello! How are you?" in Shawnee—"*Hatito! Hekowese laasamamo*?" The Shawnee words, pronounced as you see them written along with the music notes here, literally mean "Hello! How are you breathing?"

Ben shared this song with me. Now you, too, can sing to learn!

Hello! How Are You?

In the Shawnee language to the tune of

Frere Jacques



Suggestion: Click on *www.youtube.com/watch?v=ClLmYXGC6HA* and sing the Shawnee song as you listen to the *"Frere Jacques"* music.