

## Cicadas in Prehistory and Indigenous Folklore

By Kevin E. Smith

By the time you read these words, this writer will have seen the emergence of the Great Southern Brood (Brood XIX) of periodic cicadas three times, all while teaching Middle Tennessee State University archaeology students in the community of Castalian Springs. In 1998, we were working at the archaeological site of Bledsoe's Fort (ca. 1783–1793). In 2011 and most recently, the emergences occurred while we were investigating the Castalian Springs Mounds (ca. 1150–1350).

The convergence of my personal life with the Great Southern Brood reveals a coincidence of nature, history, and archaeology. The historic occupants of Bledsoe's Fort would have experienced the ancestors of our modern cicadas in the year 1790. The older indigenous inhabitants of the Castalian Springs Mounds, occupied for as much as two centuries, would have experienced the emergence as many as 16 times before the community was abandoned around 1350.

Just a few months ago, I was able to document for the first time that cicadas use bamboo species as host plants. Those who have seen some of

my writings on the vanished bamboo forests of Middle Tennessee will immediately appreciate the ramifications. I have ongoing monitoring projects at multiple rivercane stands (indigenous American bamboo) to collect convincing data that Brood XIX uses them to reproduce—what will prove to be an exciting new observation about the interrelationships of bamboo forests and periodic cicadas in the Cumberland River valley about AD 1300. The Great Southern Brood of today—deafening as it was in 2011—would be a mere shadow of what folks would have experienced prior to the destruction of the canebrakes in the 1800s.

After studying the prehistoric environments and people of the Cumberland River valley for over three decades, what is fascinating and occasionally astounding is that the science allows us to begin writing histories of these ancient sites and people and landscapes.

In the modern calendar, the date is late May or early June in the year AD 1309. The leader of the indigenous community we now call the Castalian Springs Mounds was visiting the sacred plants, including tobacco, growing in his garden. The last decade had been difficult. Droughts brought total crop failures, more often than not, between AD 1298 and 1308. The citizens of Castalian Springs came together in a flurry of religious construction about 1300, building massive earthen pyramids to support the temples of the Hero Twins and Earth Mother-the three other-than-human personages who controlled the weather and agricultural fertility respectively. They had long since run out of stored maize and the people were starving.

Wild plants and animals were suffering equally from the megadrought. The chief's authority was waning as the food shortages continued, but he knew a secret—knowledge passed down from his elders and observed during his own lifetime. He had seen the moulted skins of cicadas in the bamboo forest surrounding the town and heard the first chirps of the emerging males. For the next five or six weeks, the people would feast on the millions of insects per acre emerging around the town. And while he didn't know it, the decade of drought would break this year as well...

While this might sound more like fiction than fact, it is indeed history written through the historical sciences—geology, archaeology,



paleobotany, and zooarchaeology, enhanced by historical analogy. Tree rings tell us the dates of the ancient drought years, radiocarbon dates tell us when the mounds and temples of the pilgrimage center were constructed, and historical records of indigenous peoples provide clues to prehistoric responses to drought and famine. Historic indigenous peoples of the desert American Southwest who were frequently visited by droughts routinely kept enough stored maize to last four years. We might presume that the inhabitants of Castalian Springs followed a similarly well-informed pattern of storage. But by Year 10 of a megadrought, the situation would have been desperate.

To understand how the people of Castalian Springs might have responded to their elders' predictions that a food supply would soon arrive, we can turn to the history of the Onondaga Nation and their experiences with George Washington in 1778-1779. Because they were allies of the British during the Revolutionary War, George Washington ordered a scorched-earth campaign against the Haudenosaunee (aka the Iroquois Confederacy). All houses, fields, orchards, and food stores were to be burned to the ground. In April 1779, the colonial army carried out their orders, and the Iroquois subsequently gave George Washington and all succeeding presidents the title of Hanadagayas—Town Destroyer.

As the Onondaga tell the story today, their homeless, starving survivors were given a gift by

Above, courtesy of Kevin E. Smith: Female cicadas from the Great Southern Brood 2011 lay eggs on a shrub at the Castalian Springs Mounds. Left, courtesy of Einar Einarsson **Kvaran, tinyurl.com/nsf7d6t6:** The cicada serves as the insect model for the humpbacked flute player of Southwestern Native American mythology, often appearing in petroglyphs like this one in New Mexico. Below, courtesy of Kevin E. Smith: Shed shells of Brood XIX cicadas on a towel that had been hung on a fence to dry at the Castalian Mounds in 2011.



the Creator, which was the Ogweñ•yó'da', or cicada. The brood emerged in 1780 by the millions per acre as the Onondaga faced starvation, allowing them to survive the first year rebuilding their towns. This is the 17-year brood (Brood VII or the Onondaga Brood) that last emerged in 2018.

Every emergence since 1780 has been celebrated by the Onondaga. The ritual conducted every 17 years suggests that modern Iroquois should consume at least one raw or cooked cicada to honor the gift of the Creator that saved the tribe from starvation. While no science is ever likely to support my speculation here, I suspect that the people of Castalian Springs may well have celebrated their AD 1309 gift from the Creator with rituals when Brood XIX returned to them in 1322, 1335, and 1348. Even into the modern era, accounts from the Cherokee note that they preferred to dig up cicada nymphs (rather than adults) and fry them in hog fat as a treat. Sometimes they were baked into pies or salted and pickled for later use.

Worldwide, cicadas are, not surprisingly, associated mythologically with fertility, immortality, reincarnation, and music. Aristotle, Plato, and Socrates all admired the chorus of the cicadas in their surviving works. Aristotle was fond of eating them, although like the modern Cherokee he preferred the grubs or nymphs over the adults. In China, male cicadas were caged like songbirds for their brief lifespans. More recently in 1970, while Bob Dylan was receiving an honorary degree from Princeton University, Brood X overwhelmed the ceremony, prompting him to write the song "Day of the Locusts." (Cicadas are not grasshoppers/locusts, but the mistake is a common one.)

The musical association with the cicada is perhaps strongest among the Native American cultures of the American Southwest. The "humpbacked flute player" found in most of the ancient and modern cultures there is a

human form of the cicada (see p. 18). The Creation or Emergence Story of the Diné (Navajo) also involves cicadas. In their origin story, two cicadas are able to dig their way through the earth separating the mythological Fourth World from the Fifth World, or the world we live in today. The cicadas were the only sacred personages able to break the barrier to lead the Navajo people into the new world.

Some folks like to gripe about how annoying the Great Southern Brood can be during the brief five or six weeks of their emergence. For me, the cicada gives me pause to think about important points in my life and important points in the distant past. So perhaps this year, you might greet our periodic friends with the Cherokee "Osiyo, lolo"—"It's good to see you, cicada."

Learn more: cicadas.uconn.edu.

(Kevin E. Smith is professor of anthropology at Middle Tennessee State University and is a frequent contributor on the late prehistoric and early historic cultures of Tennessee. His article "Canebrakes on the Cumberland" appeared in the July/August 2021 issue of The Tennessee Conservationist.)



