MANHATTAN -- To Brad Logan there's just something fulfilling about digging in the soil and getting his hands dirty -- something that can't be experienced in magazines and textbooks.

Logan is a research associate professor of anthropology and runs the K-State portion of the Kansas Archaeological Field School, a monthlong biennial archaeology school for K-State undergraduate and graduate students.

"A lot of people really lose their interest in being an archaeologist when they find out that getting data out of the ground, especially in northeast Kansas, can be very uncomfortable. It can be humid and kind of buggy. And with the weather here, there's no way to avoid getting dirty and muddy," Logan said. "That doesn't come across in National Geographic -- that feel of what it's really like to come back at the end of the day kind of messed up, exhausted and worn out."

But every particle of dirt is worth it, he said, especially since the experience at a field school has students venturing outside the printed stories and pictures and encountering firsthand what being in the field is like. This experience also makes these students more appealing to potential employers, Logan said.

The Kansas Archaeological Field School began in 1968 as a collaborative effort between K-State and the University of Kansas. It originally ran eight weeks each summer. Logan first directed the school as a curator at the KU Museum of Anthropology in 1986 and then directed it six more times until 1997. In 2003 the field school became independent from KU and later transitioned to its biennial status.

On average, a dozen K-State students participate in the program. This year's school, in June, had 13 students.

Each morning before 8 a.m. Logan and the participating students take a six-mile drive to Fort Leavenworth, where they undergo a security check. Next is a hike through the woods with their gear to the 3,000 square meter excavation site. The site is on the National Register of Historic Places and was inhabited by people of the Kansas City Hopewell culture 1,600 to 1,800 years ago.

Logan and the students work at the site from about 8:30 a.m. to 3 p.m., and then spend about another hour at their field quarters washing unearthed artifacts. The soil is excavated in contiguous one square meter units.
Once an artifact is recovered, it is put in a paper bag that is marked with the site number, unit number, coordinates, depth, date found and initials of the person who found it. Paperwork documenting the artifact, as well as a description of the soil and its contents, is also required.

"We just don't punch holes in the ground. We have to be able to map the locations of artifacts and features and get data out of the ground in a controlled and systematic way," Logan said.

"Archaeology is an interesting combination of high tech and low tech. We use electronic instruments to peer below the ground and to map the site, but to get the stuff out of there it takes painstaking work with shovels, trowels and dental tools," he said.

The group uncovers hundreds of Hopewell artifacts a day, Logan said. Finds include shards of ceramic vessels; stone dart points; bones from deer, raccoon, dog, bobcat, turkey, turtle, fish and mink; mussel shells; and hundreds of pounds of burned limestone, which was used in hearths.

This group of Hopewell is unusual compared to earlier cultures in the region because they knew how to survive in this same location year-round. And despite the recovery of late Hopewell pottery shards that are generally accompanied by arrow points -- indicating the introduction of the bow-and-arrow from the Midwest -- no arrow points have been discovered, only dart points, Logan said.

Logan has returned to the same site after 19 years not only because it warrants further investigation, but also because of Bob Beardsley, historical architect and cultural resources manager at Fort Leavenworth. Beardsley, a K-State graduate, was a participant in Logan's field school in 1988 and helped excavate a site just three miles from this year's location.

While not excavating at the dig site, the field school group stays at Muncie Elementary School in Leavenworth.

"By field school standards it's luxurious. It has full bathrooms for the men and the women, and it has air conditioning in the sleeping areas," Logan said. Prior to Muncie, Logan has stayed in farmhouses, hunter's cabins, a Quaker meetinghouse and parsonage, and historical buildings at the Tonganoxie Historic Site. Following this field school, though, Muncie will be razed, Logan said.

"I was 6 or 7 when I decided I wanted to be an archaeologist, but I didn't do archaeology fieldwork until after my first year of graduate school," Logan said. "I think as an undergraduate, if archaeology's what you're interested in, you really need to do it and get your hands dirty in the field. The students who decide this is what they want to do get that chance much earlier in their education. They can do the field school and find out if they really love this stuff and if they want to do it as a career."