## Ask an Archaeologist!

Q&A with Dr. Loa Traxler, Professor of Anthropology and Museum Studies Director at UNM

1. What is archaeology?

We can define archaeology as the study of remains from people of the past, their activities and material goods, as well as the patterns these remains reveal to us about their daily lives and society.

## 2. How did you become interested in archaeology?



I was always curious as a child growing up in central Indiana about the remains of long ago native people who lived in my area. We had a small box of artifacts that were all rather mysterious and begged to be explained. I also had questions of where native people went who had once lived in this same landscape.

## 3. How did you decide you wanted to specialize in Maya archaeology?

When I started college, I was fascinated by the traditions and histories of indigenous people throughout the Americas. After finishing college, I traveled to southern Mexico to explore the art and architecture of Pre-Columbian Mexico. That trip inspired my interest in archaeology and understanding of Maya civilization and the Maya of today.

## 4. What does it take to be an archaeologist?

To be an archaeologist, it takes great curiosity, an interest in working with and sometimes solving puzzles, and a tremendous amount of patience!

## 5. What other disciplines do you need to be familiar with to be an archaeologist? Astronomy, geology, zoology, etc?

All of these disciplines are useful and contribute to archaeology, as well as many more! It really helps to have an interest and willingness to learn about different subjects in the sciences, humanities and social sciences that bridge those first two. In North America, archaeology is often part of the study we call Anthropology, which looks at human society across time and around the globe.

#### 6. How do you find a site to excavate?

Archaeologists look for sites on the ground, below the ground, underwater and even those only visible from the sky. We look at landscapes through satellite images, maps from all time periods, and look for other clues that show human influence on the landscape. We identify sites where we may find answers to some of our research questions.



## 7. Who is part of your crew?

An archaeological crew is made up of a leader, trained and experienced to design and guide archaeological research. Other team members have different perspectives and life experiences that provide the specific skills needed to help answer research questions. Crews work in the field, finding and excavating sites. Or crews work in the laboratory, analyzing evidence found in the field and making sense of the data we gather!

#### 8. Why does an archaeologist need permission to work on a dig?

Archaeological teams need permission from the people the archaeological site and resources belong to. Permits must be obtained from federal, state, and local or foreign governments or a tribal nation before work can be done. Sometimes the research is done in very sensitive or hazardous locations; sometimes the work is done with the collaboration of other countries and sovereign nations. Much of the work that archaeologists do will alter the landscape. For this reason, we often only get a single chance to work with the archaeological record at a site and to gather its specific data. We try to be as thoughtful and prepared as we can be when we start the research.

#### 9. What tools do you use in the field and in the lab?

Archaeologists use almost every tool imaginable! -- from string, brushes and shovels to airborne LIDAR scanners, nuclear reactors, and huge computer banks to process data. The particular tools we use are influenced by the questions we are trying to answer, and sometimes by what our research budget can support!



## 10. When you find an artifact, how do you decide what it is or how it was used?

Sometimes we compare recovered artifacts to materials that we already know about from type collections. Eye witness or documented accounts of artifacts are also useful to understand what they are or how they were used. Other times it takes a great deal of sleuthing to determine

what it once was or what it was made from. Chemical or microscopic analysis of the material provides clues about its makeup and use.

## 11. What's the difference between a fossil and an artifact?

A fossil is a once-living being -- plant or animal - preserved into rock. Fossils are not, in general, artifacts which are human-modified materials.

## **12.** What can you learn about the organization of a past society by studying the artifacts left behind?

We use artifacts to analyze, interpret and to look for patterns of behavior left from people long ago. When we can build up a greater and greater number of examples of these artifacts and their patterns, we can begin to appreciate how these materials reveal what groups of people did as a collective.

In larger groups, the interactions, successes and struggles of communities revealed in these artifact patterns tell us a great deal about the society. Aspects of living in larger groups are what we think of when we try to understand the society of the people represented by these artifacts and their patterns.

# 13. Have you found any evidence that shows traditions practiced today were practiced long ago?

Throughout North and South America, archaeologists have evidence that shows how various practices and technologies used in daily life continue from prehistoric times. This evidence includes weaving and spinning tools, cooking and storage vessels, hunting implements and building traditions, and many approaches to traditional ways of life.

In Mesoamerica, traditional Maya people build their homes of wood and thatch in a design from Pre-Columbian times. Many women continue to carry water in vessels that are identical in shape to pottery fragments recovered from excavations. Time keepers of today keep a ritual calendar that was used in Mesoamerica from before the Common Era.

## 14. Why is pottery important to an archaeologist?

Pottery can tell us a great deal about how it was manufactured, used, and traded by the people that once used it. Pottery is pretty durable material, and survives in sites where many other organic materials do not. It tells us about the technology and artistic expression of a craft group. Pottery also provides clues about trade, showing where resources came from and where the final products wound up.



#### 15. Have you ever found any Maya hieroglyphs in your work? What did they tell?

I have found Maya hieroglyphs in my field research. An exciting find for me were pottery vessels decorated with painted hieroglyphs placed in a <u>royal burial chamber</u> at the site of Copan in western Honduras. We still are not able to decipher the hieroglyphs on these two drinking cups. They may refer to place names near the Copan River Valley where the site is found, but the glyphs do not seem to form a text that we can understand yet.

#### 16. What's the most exciting thing you ever excavated?

Two <u>royal burial chambers</u> beneath the Copan Acropolis in Honduras. One chamber likely held the remains of the site's first Classic period king, whose ancient name was K'inich Yax K'uk' Mo' (meaning Resplendent First Quetzal Macaw), and the second chamber likely held the remains of the eighth king who followed in the dynasty after the first.



## 17. When you're not in the field or in the lab, what do you do?

My college degree was in Fine Arts, and I love to read and absorb the information on the prehistory, historical periods, and artistic heritage from throughout the lands in the western hemisphere. I also work with and share with my Museum Studies and Anthropology students the interest in what archaeology can tell us about the past and how we can be better care-takers of the collections and materials that archaeologists uncover.

## 18. What do you enjoy most about your research?

I enjoy most the understanding of a research question and the ability to share that information and understanding with the public. When I feel like I finally understand how to solve a puzzle or answer a research question that is a good day in the field or in the office!

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