ARCHAEOLOGICAL CONSERVATION IN NORTHERN HIGHLAND ECUADOR

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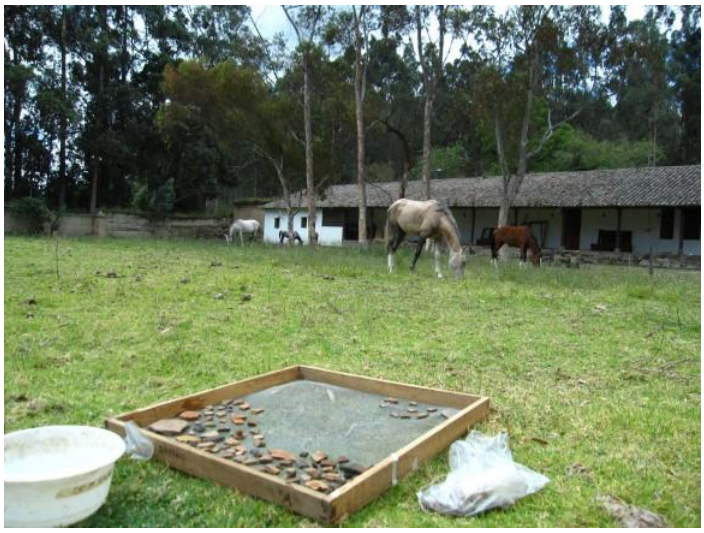
I spent this summer working as a conservator for the Pambamarca Archaeological Project(PAP), located in northern highland Ecuador, near the town of Cangahua. As the conservator on the project, my job was to examine and conserve the finds excavated to ensure their long term preservation and to aid in archaeological research. Most of the work taking place here is focusing on sites and fortresses located on various hilltops in the region. The research hopes to understand the indigenous cultures known as the Cayambes, that lived here before the Inca conquered this area in the 1500's, and also to look at the interactions between the groups after that conquest. Most of my work is based in the lab and focuses on processing the finds that come in each day. This can be something as simple as washing some sherds to something more complicated like reconstructing an entire ceramic vessel. I also sometimes work on site helping archaeologists excavate and lift fragile artifacts. This is my second year working on the project and here are some of the things I do during a typical work day:

Area where we work

The site of Quitoloma, one of the hilltop fortresses excavated by PAP.



Finds that come in, such as pottery sherds in bulk, need to be washed daily.

When enough of a ceramic vessel is preserved, we reconstruct it. Here I am starting to reconstruct the neck and rim of an aribalo, a vessel form used to hold liquids.

This a painted aribalo that was reconstructed. The rim and neck are missing.

Because of the missing upper section of the vessel, some of the joins are not well supported. This fragment only attaches on one side and needs extra support. Conservators sometimes do something called "gap-filling" to fill missing areas to keep certain fragments in place. The red arrow points to an area where a fill was placed (made up of a mixture of a resin known as Paraloid B-72 mixed with a material called glass microballoons to make it thicker) to fill the gap below the sherd to support it.

Sometimes conservators are called to the site to help archaeologists excavate and lift fragile material. Here I am preparing to lift a fragment of a burnt reed mat.

Here is a section of the burnt mat in situ. It was found on the floor of an Incan store room with a thick layer of burnt corn on top. Organic materials don't often preserve well, but luckily this mat was burnt allowing it to survive this long in the soil.

The mat was very fragile and in a lot of pieces so it could not easily be excavated and lifted. I needed to do something called block lifting where you excavate around the object and then lift it out in a block of soil. Here is the mat after a facing of Japanese tissue and a reversible resin are

applied on the exposed surface. This helps to hold all the fragile fragments together during lifting.

Once lifted and back in the lab, the mat could be carefully excavated from the soil and consolidated with a dilute resin when needed to strengthen it.

Here is the mat after treatment. It can now be examined and studied to identify the materials and methods used in its construction.

Not all of our work is just treating artifacts. Conservators spend a lot of time documenting and recording the treatments they undertake on artifacts. Here a student helps to enter data about artifacts excavated into the project database.

We also spent time labeling the artifacts in the lab. We used a barrier coat of Paraloid B-72 applied to a discrete area of the artifact to write the catalog number on using an archival ink pen. This would allow the artifact to be linked to its catalog number, and the archaeological information in the database, in case it ever got disassociated from the label in the bag it was packed in.

Since the excavation is run as a field school, it means that students are on the project as part of a course to learn about archaeolgy and archaeological field methods. This gives me an opportunity to teach students about conservation and have them help me in the lab if they are interested. Here a student helps me find joins for a vessel I was reconstructing.

So as you can see, archaeological conservators are kept really busy on excavations doing a wide range of activities. If you are interested in learning more about conservation and what conservators do, or think you might be interested in pursuing studies in conservation, you can check out the website for the American Institute for Conservation or the International Institute for Conservation for more information.