The Upper Sabina Tiberina Project

This year I was awarded the Peter Marsh Prize which enabled me to travel to Vacone, Lazio, Italy to assist Archaeobotanist Dr Erica Rowan as part of the Upper Sabina Tiberina Project. The project is a collaboration between Rutgers University (New Jersey, USA) and the University of Alberta (Edmonton, CA) which has been in operation since 2011. With the support of the Soprintendenza Archeologia del Lazio e dell'Etruria Meridionale and the Comune di Vacone, the project seeks to understand the long-term development of rural settlement and economy in the Sabine region of Italy and is currently excavating a Roman villa that was in use from the late-Republican through mid-Imperial periods. The team consists of staff and students from the United States, Canada, the United Kingdom, and Italy, with two field schools that train undergraduate and graduate students in archaeological field skills and methods. This season there was an increased focus on environmental archaeology, conservation and the processing of small finds excavated from Vacone. For the July season, I assisted in processing archaeobotanical material from the site through flotation and residue processing.

Despite having studied various aspects of archaeobotany, I was inexperienced when it came to the actual fieldwork. As such, my first week was spent being trained in flotation techniques. Without being too technical or long-winded, flotation is used to recover tiny artefacts and plant remains from soil samples by sieving the soil through very fine mesh in a (often makeshift) water tank and collecting the material that floats to later analyse under a microscope. Archaeobotanical material that is most likely to float is carbonised or mineralised, and what type of material you find depends on the conditions of the soil. The climate of Vacone meant that we primarily found carbonised material, such as olive seeds and charcoal, but some mineralised material has been found at the site in the past.

The material that doesn't float, known as 'residue', is put through a 2mm sieve and left to dry, making it easier to separate the archaeological and/or archaeobotanical material by hand, known as 'residue processing'. This is necessary as it makes sure all of the archaeobotanical remains that didn't float are collected, as well as other materials and remains such as glass, shell, iron, and bone.

This first week was very much a learn-as-you-go experience, enabling me to get the hang of things quickly and effectively, helped on by the vast quantity of samples we had to get through in just a few short weeks. This was extremely beneficial as, on the same days that I was learning these techniques, I had the opportunity to demonstrate and teach these techniques to the undergraduate students in their afternoon sessions.

The soil samples that I was processing in the first week came from the backlog from the 2018 season, taken from trenches in the bath complex, graves, and production areas. The baths turned up a charcoal pit, suggesting the team were getting close to the hypocaust. The villa itself was used as an olive oil production facility, thus the presence of olive seeds in many of the samples was unsurprising. The grave samples revealed fragments of human remains from the Lombard era, showing that activity resumed on the site after the villa was abandoned in the 3rd century AD.

By the second week, Erica and I had finished the backlog and were getting deliveries of soil samples from the 2019 season. This was also the week where we had to switch to machine-assisted flotation, whereby we'd use a pump to keep up the continuous flow of water rather than a hose, so we didn't drain the town's water supply. Again, there were the ever-present olives in most of our samples, as well as a growing collection of mouse bones, but things did pick up by the end of the week when we received many samples from a newly excavated drain. The exciting thing about 2,000-year-old drains

is that the conditions inside them allow for more variations in preservation, such as mineralisation, and we were also able to take parasite samples because, let's face it, no matter what time period you're dealing with, drains have always been disgusting and allow for this sort of thing. By looking through a microscope we were able to see the ancient remains of flies, including wings and parts of the head, which was actually surprisingly fascinating. The following week, the drain was turning up eggshells, more mouse bones, and even a bone hairpin.

Being 3 weeks in, my confidence in flotation practices had grown considerably and I was able to carry on by myself while Erica was busy with the microscope. While I was being left to my own devices and floating a drain sample, I found a very unusual find; a glass game piece (like a counter) that had evidently fallen into the drain nearly 2,000 years ago. I was particularly proud of this find as, due to the discolouration of the glass, it was an extremely difficult spot. Additionally, this week really allowed me to test my abilities as I was able to train an undergraduate student and another archaeobotanical assistant (who would be taking over for the next season) in flotation practices unsupervised. I found this especially rewarding as I felt that Erica had complete trust in me and that I'd really mastered what I was doing.

By the end of the season I was essentially in charge of flotation and was floating in excess of 70 litres of samples a day, even managing over 100 litres in one day towards the end of the last week. While there were of course challenges that came with the very hands-on work of archaebotany in 40-degree heat for 8 hours a day, the finds we made and the skills I have gained made these challenges so worth it. I will always be grateful for the invaluable opportunity to be a part of the excavations with the Upper Sabina Tiberina Project. I came back from this trip feeling inspired by the passion that everyone had for the project and I look forward to returning next year. This experience would not have been possible without the generosity of Royal Holloway for awarding me the Peter Marsh Prize, and for that I am extremely thankful.