

# A FREELANCE ARCHAEOBOTANIST'S DAY

July 29, 2011 Lisa Gray Commercial Archaeology, Day of Archaeology 2011, Environmental Archaeology, Science Anne Davis, chemicals, DJing, Dominique DeMoulins, environmental archaeologist, Espresso, Fighting Lions Martial Arts Academy, Gill Campbell, Google, Gordon Hillman, John Giorgi, Lisa Grey, London Archaeology Service, Medway Children's University, Moonlight cafe, Museum of London Archaeology Service, Near East, Obama, Player, President, Radio 4, Radio 5, Radio 5 Live, regional science advisor, Ruth Pelling, Sampling, search set-up, shed I, Sports Diver, static electricity, United Kingdom, United States

I'm an environmental archaeologist specialising in plant remains. These are plant macrofossils (not microfossils like pollen or spores). I look at the larger items -seeds, grains, chaff, wood, some tubers, other surviving plant parts. My lab is my spare room. I don't need to use chemicals in my work so this is safe to do. The room where I work has the same sort of equipment and manuals I used while I was employed by the Museum of London Archaeology Service. What I miss is the experience and guidance of John Giorgi and Anne Davis with whom I worked straight after my MSc in 1996 during my 'apprentice' archaeobotanist years.

Now I'm a freelance 'journeyman' I make up for lack of colleagues by making use of the Jiscmail Archaeobotany Mailing List (with many experienced archaeobotanists on it from all over the world) and attending archaeobotany workgroups. I have also visited the English Heritage archaeobotanists (Gill Campbell, Ruth Pelling and Dr Zoe Hazell) at Fort Cumberland to use their reference collection and ask advice. They've been extremely helpful and have a unique set up that I hope survives the cuts. I've also appreciated the advice and support of EH regional science advisor for the South-East, Dr Dominique DeMoulins. As a UCL alumni I've been able to arrange to use the seed reference collection built up over the years by many researchers, one being Prof. Gordon Hillman who I was fortunate enough to be taught by for my MSc in the 1990s. I've enjoyed building up my own seed collection and herbarium. I have seed and wood anatomy manuals but nothing is as good as having a modern specimen to compare with an archaeological one.

Today I have 'flots' to sort for an assessment. This is good news as I had a three week gap in May/June and not enough money to go on holiday with during the heatwave. But I completed my 2011 tax return and cleaned out Thanet Archaeology's flotation system during that time with plans to use it.

I work from home so the first thing I've done today is take a mug of triple Espresso to my study and login to my gmail account and switch on the radio. I'm currently fond of Radio 5 Live -for the talk rather than the sport. The radio and gmail will stay on all day unless I'm writing up a report. BBC Player has become a good friend too. I do drop in on facebook. It makes up for some of the laughs and chat I miss from my employee days. It also reminds me what a unique thing I'm doing for a living today.

Today I'm assessing some English 'flots'. 'Flots' are the light material that float into a fine mesh sieve when an environmental bulk sample is processed. These come to me in plastic sample bags in a box by post. I very rarely get asked on site while samples are being taken. I would like to be as it would be good to see the preservation conditions and chat with the field team about the features and their sampling strategy. I'm also rarely the one processing my samples but I'm ready, willing and equipped to

make site visits, take and process samples myself. If I were on site or in the processing shed I could double-check labelling and record keeping. A hard dug sample is useless if the labels fall off bucket or the bags split. I could also see evidence of bioturbation on site that I can only infer from the flot contents at present.

Assessment is the first stage of analysis of the plant remains in a sample. I'm looking for abundance, species diversity and quality and type of preservation. This information will help me recommend which samples should be studied in more detail at analysis stage and estimate time and costs for that.

When I open a bag of flot I pour it into a measuring jar and if it's very large and diverse I'll sub-sample it through a riffle box. Whole or sub-samples of flot I pour through a stack of geological sieves. This makes it easier to see the plant remains. Sometimes I can just pour the flot from the measuring jug onto my petri dish. I use glass jars and dishes because plastic creates static electricity and items then to 'stick'. I won't have to sub-sample the flots I have today as many are too small to need sieving and a detailed count isn't necessary for assessment.

First archbot-related email of today is from the Archbot Mailing List. It's a message sharing an article about flora in the Near East. I'll save it to read later. TheNear East isn't my area but I can learn something from methodologies and you never know I may get the chance to go there and staff a flotation tank there one day.

What I'm seeing in these flots are fragments of roots, flecks of charcoal, terrestrial snails and the occasional charred or uncharred seed or cereal grain. I'm recording these onto paper record sheets using a black biro ( I've heard the ink lasts longer on paper than pencil but I'll look into that as there's the plastic waste problem) while listening to Radio 4's 'Cabin Pressure'. I don't know much more about these samples yet as I'm waiting for strat and phasing info. This doesn't always come at the same time as the flots but I'll need them to write up the report next week.

11.55am -Yes! Some bread wheat grains in one of a series of pretty sterile flots so far. Negative evidence is as useful as positive evidence but it feels good to report back with some archbot finds – I hope it encourages the diggers to feel their sampling efforts were worth it. I'm starting to get samples from the area of England that my paternal ancestors came from – all agricultural workers so I have a kind of stakeholder link with these plant remains.

12.00 noon- nipping out for fresh air, daylight, human interaction and a quick lunch

1.05 pm -had a quick lunch at the Moonlight cafe reading the 'I' paper. Back home to hang up my shortie wetsuit (pool training for Sports Diver with Canterbury BSAC- I've dreams of taking my archaeobotanical skills to submerged cultural landscapes and shipwrecks via NAS and love aquatic wildlife anyway). Radio 4 'World at One' and another flot to scan and record.

1.55pm -Just told a cold caller to leave me alone I'm working. Glanced at my emails – one from the IFA MAG group about the draft planning framework -will have to get my head round that soon- lots of worries there – developer funded arch hasn't been perfect but has given me a job on and off for 14 years. Something about assessments of arch from offshore windfarms (my ears prick up) and a wonderful PhD with funding...in Orkney though (ears droop). Another from my Google search set-up telling me there's something on 'submerged prehistoric' I could look up. But back to the flots for now. Radio 5 Live – the Murdoch empire.

2.37pm – Radio 5 – President Obama talking about the US debt crisis- I've just realised that this time last year I'd have done my archaeobotany for kids 'pongs and potions' Archaeological Detectives outreach with AMTeC co-op Ltd for Medway Children's University. It was cut. My study should be smelling of remnants of pomander bead ingredients now.

4.00pm – cuppa tea .... Flot sorting's going well. Next job will be data entry. I'm stopping at 5pm to go to a Kungfu class at Fighting Lions Martial Arts Academy in Whitstable. As I do a sedentary, solitary job I need to exercise regularly and it's fun to do it with other people. Swinging a Chinese broadsword keeps my mattock muscles ready should I get the chance to go and dig.

So, that's my day. When I first heard about the Day of Archaeology I wasn't sure I'd be doing any archaeology on this day. I've no idea where I'll be this time next year. I've no idea how I'll be earning a living this September! I may go back on the supply teaching list for a bit if they'll have me back. While I have work I'm looking for ways of keeping going in archaeology if I have gaps between projects of more than a couple of weeks – maybe funding to write a few papers in my own name and to help out in community archaeology projects. As it is you can't preserve archaeologists in situ – but, to keep solvent I may have to put dust covers my microscopes and earn a living another way for a while. I hope not.