

A day in the life of a GEOGRAPHER – Palaeoecologist

Dr Aaron Potito (Geography, NUI Galway) takes us through a typical day and what it's like to be a Palaeoecologist.

What is a Palaeoecologist?

We look at how the natural environment changes over time, using pollen and insect fossils to tell the story of landscape and climate changes.

"You have to know the past to understand the present" (Carl Sagan)

What inspired you to become a Palaeoecologist?

A growing frustration with grass cutting! I had been studying grassland species, but they kept coming along cutting the grass, ruining my research. So I switched to the Rocky Mountains, where I looked at the ecological history of the mountain range.

What does a typical day look like?

I begin my day by checking in with my graduate students and their research. Then I do a last check on the material for that day's lectures. Then it's admin work (I am the Head of the School too); prepare for upcoming fieldwork (maybe checking equipment or designing a sampling strategy); work on a publication or put together a funding application. I then lecture on a variety of topics from my specialised area to general physical geography. The day may then end by taking some graduate students out to train on the use of coring equipment, or a lab technique.



What's your favourite project to date?
We used fossils from midges (yes, those tiny annoying insects) buried at the bottom of lakes to track global warming over the ages. The project shed light on Ireland's climate history using isolated lakes from Donegal to Kerry.

"A third of adults regard climate change as most pressing environmental challenge"
[*\(Irish Times, 2019\)*](#)

What do you enjoy most about your job?

It is essentially detective work. We try to piece together the clues to shed light on the mysteries of climate and landscape change through time.



Where has been your most interesting field site?
The Tibetan plateau. We carried out an investigation into the pollution of a lake. The culprit was expected to be global warming, but in the end the evidence pointed towards modern localised cultivation practices and air pollution from outside the region.

How does your work make a difference to today's world?

If we can identify how climate worked in the past to change the natural environment, we can understand how decisions made now will impact on the state of **our planet in the future.**

How would someone get into this area?

The typical route would be a degree in Geography or Environmental Sciences, followed by a more specialised graduate programme in the palaeo field.