

Claire Burke - Class of 2003

A former Penwortham Priory student is spearheading a pioneering project to track and save endangered animals.

Award-winning Dr Claire Burke attended Priory between 1998-2003 and left with three A*s and seven As – along with a love of physics inspired by former teacher, Mrs Gough.

The 31-year-old has been awarded the silver prize for physical sciences in Parliament at STEM for BRITAIN recently and will be awarded a British Science Association Prize for Digital Innovation in September for her work with drones and animals.

Astrophysicist Claire is the lead in a Liverpool John Moores University project which is using heat seeking drones to differentiate and track rare and endangered species using their heat patterns. The idea was adapted from using heat to investigate the age and size of stars and planets but now it is being used on the ground and is being hailed a success.

Claire has appeared on the BBC, in the New York Times, on the Discovery Channel and on the National Geographic Channel taking about her groundbreaking work. She even made it onto the 6 o' clock news where this BBC video explains how it all works >> <http://www.bbc.co.uk/news/av/science-environment-43643165/using-astronomy-to-save-a-species>.

“It’s a dream job really,” said Claire, who hails from Longton with her dad still a governor at Priory. “I was definitely inspired by my physics teacher, Mrs Gough, at Priory. She encouraged us to look at the life cycle of stars as well as space and she inspired me to go into physics. I still keep in touch with her now.”



After studying for her PhD in Astrophysics Liverpool John Moores University, Claire then got a research job in South Africa before returning to England to be a Climate Scientist with the Met Office.

Then she saw her dream job advertised – ‘Applying techniques from Astronomy to help save endangered species’ back at Liverpool John Moores University. “I saw that advertised, I love animals, and it sounded great. Luckily I got the job.

“It’s adapting heat detecting drones to track and record rare or endangered animals. We have spent time at Knowsley Safari Park testing our equipment with the animals, it was great getting involved with the rhinos

there, and we are off to Malaysia soon to test them with orang-utans. It's so rewarding to make an impact in real life and make a difference.

"I don't know whether I could go back to looking at space now after the excitement of solving problems on earth and seeing the rewards.

"We presented our findings to the Astronomy Conference at the European Week of Astronomy and Space Science in Liverpool and it's taken off since then as the national media has become interested, which is fantastic, in highlighting our work.

"I think back to my Priory days and they inspired me. It hasn't always been easy, I didn't get the top marks at university and I had to work really hard but if you put your mind to it, you can achieve what you want.



I went back to give a talk recently to the Astronomy Club at Priory and it was a bit strange talking to teachers who used to teach me as an adult but I owe Priory a lot."

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