



# MathsReach

## Bio Sketch for Alex James

### What area of maths do you mostly work in?

Mathematical modelling, primarily biological and ecological. I like to use maths to describe the real world and help me understand what's happening there. Recent projects I have been looking at include... Can larval fish cause plankton blooms? Why do larval fish appear to grow faster when their food arrives patchily? How does kidney disease effect the inner workings of kidneys? If bird flu strikes how will it spread?

### What were your best and worst subjects at school?

I was best at Maths and Physics though I never did any biology. My worst subjects were English and Art which I dropped as soon as they let me.

### When you decided you wanted to be a mathematician and why

I knew I wanted to be a mathematician or a scientist from about age 6 or 7. I always had the suspicion that there was more to maths than the stuff they taught at school (which I often didn't find that interesting). It's like knowing you want to be a novelist - you'll probably still find learning grammar and doing spelling tests dull but you know they're useful eventually.

### What training (degrees and subjects) you've done

BSc (Hons) Mathematics, University of Newcastle-upon-Tyne.  
MSc Nonlinear Dynamics and Applications, University College London  
PhD Applied Mathematics, University of Leeds.

### Most interesting place you've travelled with your research

I've been to a lot of Europe (Spain, Italy, Switzerland), America and Australia. I'm planning to go to Brazil later this year.

### If you follow sport, what sport, and which team - if not, why not!?

I do do some cycling, tramping, rock climbing and long distance running. I (kind of) ran the Milford track and the Routeburn track last year.