

# Josie Arthur

Consultant – Ecology & Biodiversity



## Who am I?

I have always had an interest in animals, their environment and the way they interact with one another, so a career in ecology was a perfect choice for me. I studied Zoology for my Undergraduate degree and Conservation Science for my Masters degree and have been working as an ecologist for five years. Being an ecologist involves a mix of activities; spending time split between carrying out wildlife surveys in the field and writing reports & attending client meetings.

## What do I do at ERM?

I work as a consultant for ERM as an ecologist based in the London office. I have been involved in a variety of projects both in the UK and abroad. These have ranged from advising rail engineers on how best to avoid significant impacts on habitat connectivity in the UK to assessing the impacts of a new mine in Southeast Europe with respect to protected birds and bats.

The theme which connects all the projects I have worked on at ERM is fieldwork. I spend a considerable amount of my time in the field conducting ecology surveys, which means no two days are the same. I can be in a pair of waders in a pond in the morning looking for newts, giving a presentation to a client in the afternoon and out with a bat detector at night searching for bat roosts. Being an ecologist at ERM is definitely not your typical 'office job'!

## What was my geography education?

I studied geography right the way through my entire education from primary school and GCSEs up to my interdisciplinary Masters degree. In fact, one of the core subject areas of my conservation masters was geography. It included aspects of both physical and human geography. Physical geography has enabled me to understand how ecosystems can change over time, how humans can change ecosystems and how these changes affect animals. Human geography, including topics such as sustainable agricultural practices and urbanisation, has enabled me to understand how the movement and actions of people can impact animals and their ability to survive, which are essential insights for studying conservation. It is this combination of studying physical & human geography and ecology which enables me to effectively do my job as an ecologist.

## How do I use fieldwork in the job that I do now?

Almost every project I work on at ERM involves fieldwork – some in more glamorous locations than others! The first step in most of the projects I work on is to visit the project site and determine which habitat types and animal species are/ may be present. Determining whether animals are present is sometimes simple (birds like to sing and are relatively easy to identify) but other animals are more secretive and difficult to find (snakes and lizards), or need to be searched for at a particular season or time of day (bats). The habitats and field signs of animals you find on the project site in this first visit determines if additional field work, such as animal specific surveys, are required. Animal specific surveys can take months to complete and often involve multiple trips to the field, but are vital to understanding what animals are living on the project site.

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The data gathered from this fieldwork provides the information needed to advise on how the project could avoid impacting animals, reduce the impacts on them and if necessary off-set the impacts. Essentially, fieldwork is at the core of all the work I do at ERM.

## What inspires me about geography and fieldwork?

Using field skills to find animals and observe them in their natural habitat is my inspiration; you never know what you will find when you begin a field survey! Many ecologists use the phrase *“animals don't read the textbooks”* because sometimes you find animals living in the most unlikely of places, miles away from where the textbooks tell you! Gaining valuable field skills has allowed me to travel around the world to carry out ecology surveys and see some incredible animals over the years (some of my favourites are shown below); I have had many truly inspiring experiences as a result.



## What has been the most interesting highlight of my career so far?

For me, understanding a project site through fieldwork and advising clients on how best to avoid, reduce and off-set impacts of their projects on the habitats and animals present on the site that they will be developing is a very rewarding process. This aspect, and knowing that the advice that I give could, and does, help make a positive difference to the environment, is definitely one of the top highlights of my career so far.

## What tip would I give to someone thinking of following a geographical-related career?

Before the final year of my Undergraduate degree, I spent 12 months on a sandwich placement working as an assistant ecologist. This gave me a lot of really valuable field experience. Some of my friends worked for consultancies or charities in the summer holidays doing fieldwork which were different but equally valuable choices. By spending time building field knowledge, you will gain invaluable skills and experience that will really kick-start your career and also allow you to see what aspects of a geographical-related career you might most enjoy.