



Environmental Science in the Field

Introduction to Environmental Science field work

Narrator

Field studies are a fundamental part of environmental science because of all of our theories and ideas about the environment works are based on field work.

Man 1 (talking to students)

Okay, so we can put the data in and we can come up with a prediction that we're going to get more evapotranspiration top than bottom.

Narrator

Field studies are like detective work because you have to go out and collect evidence. You have to amass a certain body of data and you have to analyse it carefully and then see whether you can come together to a full understanding of not only what the environment's like now, but what's happened to it in the past and possibly what's going to happen to it in the future.

Man 2

There were just big ice sheets to the north and west of here so maybe in cold spots it retained ice for longer.

Narrator

The environment is a very complex series of integrated systems and that includes things like the weather, the hydrology, the soils, the vegetation. They all link together to give you an overall understanding of what's going on. You can't study any one bit in isolation and hope to understand the whole picture.

Man 2

What would you be expecting to happen? Where is the water going to be flowing fastest and where is it going to be flowing slowest in a particular cell? Slower in the middle? What are the sort of reasons behind thinking that?

Narrator

The job of an environmental scientist is not only to interpret its existing data but to answer particular questions so having looked at what you know about the environment you'll come up with some hypotheses, some ideas about what you think is going on and then you need to be able to design experiments and collect the right data to be able to answer your question. What the students are going to be doing this week is learning quite a few of the skills that they need to be able to be environmental scientists and so they'll be learning how to operate equipment, how to carry out chemical analysis, how to take samples, and perhaps slightly overlooked sometimes but very very important, they're going to learn how to take really good field notes because that's your record of what you've seen and it's no good thinking I'll be able to come back to this later. I'll know what's happened. You have to get in the habit of making very good detailed notes that give you all the information you need later on when you've thought of all the questions you should have asked when you were out in the field.