



Environmental Science in the Field

Habitat Study

Narrator

What the students are doing at the moment is learning how to do a phase one habitat survey. They're trying to summarize their observations on a fairly coarse scale using a map.

Man 1

There's a complete description here of what you're supposed to do, how you're supposed to do it, how you're supposed to undertake your field work. How you're supposed to prepare your final maps.

Narrator

They have to look at the different types of vegetation and classify them into broad groups like grassland, woodland, scrub, fen, mire, fairly broad categories, and then by looking at the plants it enables them to decide which one of those categories the vegetation falls into. And we have a colour coding scheme that they have to learn from a, there's a reference book, with very clearly defined nationally agreed colour codes and they can show on the map and shade it in, depending on which habitat they're looking at.

Man 1

So you have these coloured maps produced and the idea is that those colours are uniform if you like, so you use the same colours for the same type of vegetation anywhere in the country, and generally it's sort of green or woodlands, oranges for grasslands, purples for mires, and if you identify a piece of land as being for instance, what shall we choose? Marsh or marshy grassland, where it's got what type of grassland. And it could be an acid grassland, a neutral grassland, a calcareous grassland, it could be improved grassland. There's a range of possibilities. As an example, see the fields which are a much richer green colour. Those are fields which have been improved. And you can improve fields by adding lots of fertilizer to it or you can sometimes sort of partially improve land by having a very high stocking rate. This stuff we're on here, would you classify this as being improved or semi-improved? Do you think there's any chemical fertilizers put on to it? Any huge stocking rate, lots of sheep dung and stuff? Okay so we've got a piece of grassland which is probably unimproved and what we're looking for are indicator species which help us make that decision. You've already seen the mat grass, remember the mat grass with the tillers, so lots of tillers there. So there's masses of mat grass here. So we've got quite a few plants here which are all indicating acid conditions so we can classify this area then as being an acid grassland.

Narrator

It enables us to take a big picture. Mapping exercises like this have been going on for the last fifteen years or so and we were trying to cover the whole country

Man 1

Don't worry now about everybody trying to mark down everything. We'll run through it partially together when we get back in so have a look at the map and maybe make a few notes on it. Okay, almost all of the area between where we are now and the eastern boundary. The eastern boundary is that long sloping line which follows the track coming up from the road that eventually heads to the centre. All of that is going to be mapped as being unimproved acid grassland.

Narrator

It helps us to identify areas where you're likely to find certain rare species so we can decide on areas that need protecting. Where you have areas of development it helps you decide on whether development should go ahead. What kind of development should go ahead and any mitigation factors you might have to bring in. Any habitat creation you could do while you're doing it.

Student – female

It all came together when I climbed to the top of that hill because you're sort of looking at areas on the ground and sort of looking at what vegetation there is and trying to identify the underlying geology by what soils there are, what plants there are, and when you actually go up there and have a look it actually makes it quite apparent, the different patches, brighter green areas of the grasslands and the fen areas are obviously a different colour so it brings it all together.