

'But is it science?'

A day with the CCFG at Stourhead (Western) Estate, Wiltshire

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On 16 April I joined a happy excited huddle of 35 people in a car park by Stourhead: the joint meeting of the Continuous Cover Forestry Group and the Country Land and Business Association (CLA). The meeting was hosted by Andy Poore and David Pengelly, of SelectFor Ltd, who manage the Stourhead (Western) woodlands on behalf of the owners Nicholas Hoare and family. It was to be my first day in a forest since joining the Forestry Commission. It was cold and sunny, a beautiful day to be away from the congestion of the South-East. More to the point, it was a beautiful day to appreciate the forests of Stourhead: the diversity of size, species, shape, light ... and especially the huge Douglas firs. Undoubtedly the estate has benefited from the long-term commitment of the Hoare Family and forestry professionals, dedicated to the principles of what we now know as continuous cover forestry. All of these qualities I could

appreciate as a forester. But what took me there was my curiosity as a social researcher.

Forestry can be thought of as a science, an art or a culture. A large area of social science has devoted itself over the last decade to the study of 'how science is done' – is it objective, uncovering the truth about the physical world? Or is it a more complex human activity influenced by changing values and the ways that people behave in groups? How do scientists share ideas, and how do new perspectives (or paradigms) emerge? And how is science applied? Is it a simple matter of communicating scientific truths to policy makers and practitioners? (If all this seems a bit abstract, 'science' can be replaced with 'knowledge').

All of these questions can be asked of forestry. They rarely have been. All of them, as any forester might comment, are messier questions in the world of forestry than in the world of atomic chemistry. But that makes them all the more intriguing – and important. If we are to manage our forests sustainably – and, equally importantly, if the relationship between society and its forests is to thrive – we must understand how knowledge about forest management is shaped and shared.

Stourhead, in the company of the CCFG, seemed like a good place to start asking about these things.

A lot of people told me Stourhead is the best you can get in terms of CCF. A lot more people have given me quite different visions of CCF since then. The pages of this newsletter show continued attempts to impose some order on the use of language. But it is very clear that what passes for CCF in Deeside, or even in the PAWS-in-conversion sites of Hampshire, doesn't resemble Stourhead. My reflections here are those stimulated by the Stourhead visit; other sites and other versions of CCF will only add to those thoughts over time.



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*Forestry is a science that emerges through practice and dialogue.
Participants at the CCFG Stourhead (Western) meeting, exchanging ideas by the base of a felled Douglas fir.*

So, is CCF science? Comments from CCFG members during the day included: ‘we used to be seen as cranks’; ‘there’s a danger of it being like a religion’ ... ‘an inexact science’ ... ‘forestry without the handbook’.

While the philosophy may have preceded the science, there was plenty of science in evidence. The centrality of numbers was very clear throughout the day. It was fascinating to hear how members of CCFG had ‘stumbled across the AFI research network in France’; how data was being collected by practitioners because it wasn’t available from scientists; how networks of unreplicated permanent sample plots (PSPs) provide enough data for rigorous analysis because of their scale and number. It made me think of the vast amounts of data on species distribution and abundance collected through monitoring networks of volunteers and natural historians, which the government now depends on for reporting to the Biodiversity Convention. The boundary between ‘official science’ and ‘practical data collection’ is, once again, clouded.

Two reflections on this highlight the need for science: ‘the only way to find out if we are doing the right thing is to continuously monitor the stand and increment’; ‘it’s a moving target – it’s all about the journey.’ The numbers don’t tell you what to do, they tell you what you have done. It seems like leaving tracks in the snow. But by examining those tracks, we can infer the kinds of patterns that work, and from that provide more replicable guidance to others.

This isn’t *not* science. Done systematically, it is adaptive science – the widely accepted approach to our increasing recognition that the answers don’t stand still in complex systems.



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Andy Poore leading an animated discussion about the management of Douglas fir at Stourhead (Western). CCF allows for adding girth well beyond the usual 70 years, adding value beyond discount rates, and highlights the fact that CCF takes us into new areas of forest economics.

Numbers were also present in the form of economics, of course. Andy’s description that ‘we want to use the forest like a supermarket shelf’ saved us from getting too carried away by how pretty it all was. While some of us were just impressed by the vastness of the Douglas firs, the news that CCF allows them to continue adding girth well beyond the usual 70 years, adding value beyond discount rates, highlighted the fact that CCF takes us into new and

interesting areas of forest economics. Each of seven newly felled Douglas firs was worth an impressive £1400. If only everyone’s ancestors had thought of planting them 100 years ago, in areas of suitable soil and rainfall, and then managing the forest around them for landscape diversity!

There was something more revealing about the day however, and that was the way that foresters see forestry. One described marking as ‘the most exciting thing we do’. Others say: ‘CCF puts the forester back in the forest’; ‘foresters can do real forestry’; ‘it’s much more difficult and skilled’; ‘there’s always something happening’. This demand for skills and flexibility makes new demands on society. Skilled chainsaw operators are notoriously hard to find. Sawmills want predictable inputs. Forestry courses are struggling to find students and marking can’t be taught by computer.

This isn’t the place for conclusions. My day with the CCFG showed me that forestry is a science that emerges through practice and dialogue, and some of the great philosophers of science would say that is no different from the way that atomic chemistry is researched. The difference is, however, that there is no one objective answer – forestry is a on-going conversation between society, foresters and nature. As for social science, well that requires more than one field trip, and if any reader wants to talk to me about their experiences and perceptions of CCF, the role of numbers, science, values, emotions and changing worldviews ... please get in touch.

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Further information:

Social and Economic Research Group:
www.forestry.gov.uk/fr/INFD-5XNATV

Environmental and Human Sciences Division:
www.forestry.gov.uk/fr/infd-5zdey6

Technical Reference

A report on continuous cover silviculture at Stourhead (Western) Estate is now available:

Poore, A. 2007. *Continuous cover silviculture and mensuration in mixed conifers at the Stourhead (Western) Estate, Wiltshire, UK*. SelectFor Ltd. 39 pp.

Available from:

SelectFor: www.selectfor.com

CCFG: www.ccfg.org.uk (members only)