

**T10Q IN THE CONTEXT OF EVIDENCE-BASED FORESTRY – A BRIEF DISCUSSION NOTE**

Gillian Petrokofsky  
University of Oxford  
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**Background to evidence based policy**

'We are, through the media, as ordinary citizens, confronted daily with controversy and debate across a whole spectrum of public policy issues. But typically, we have no access to any form of systematic 'evidence base' – and therefore no means of participating in the debate in a mature and informed manner'. So said the President of the Royal Statistical Society, Adrian Smith, in 1996 when commenting on the new concept of evidence based medicine. He posed the question 'But what is so special about medicine?' and went on to suggest other fields which would benefit from the approach taken by medicine (Smith 1996).

Since then, there has been a change of Government in the UK; the Labour Government arrived in 1997 with a 'modernising agenda' and a commitment to delivering 'policies that matter' and which are 'based on all available best evidence' (Cabinet Office 1999a, Cabinet Office 1999b). There has also been a spread of evidence based practice into some of the fields suggested by Smith, notably education social justice and more recently, nature conservation (Stewart, et al. 2005).

The most persuasive argument in favour of a systematic approach to scientific evidence is that decisions taken as a result of a systematically reviewed evidence base are more robust, in the sense that they have been reached by eliminating all the uncertainty possible within available resources, and then choosing options with known and acceptable levels of satisfaction and risk (Mulrow, et al. 1997). An important consequence of a robust science base is that it can be used to help avoid the type of policy disaster which occurred at the time of the BSE outbreak in the UK and which led to a great loss of public confidence in science and in politicians when the government admitted that it had ignored relevant research on the disease and its control (van Zwanenberg & Millstone 2005).

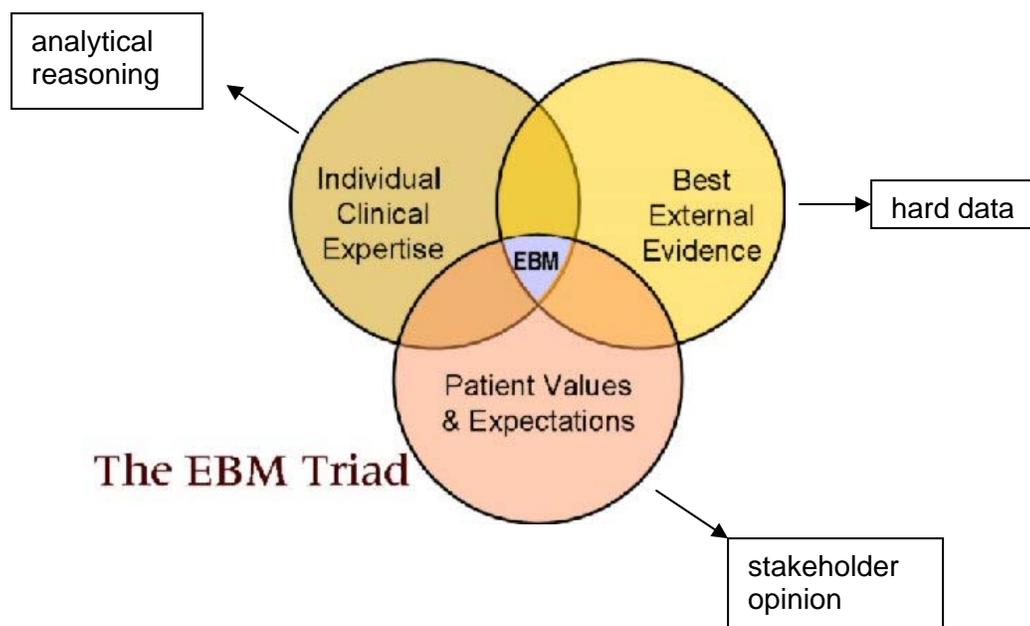
**Need for robust evidence in Forestry**

Evidence based policy making is now established Government practice. Defra, the Department which deals most closely with forestry-related issues, explicitly states that they view it as an '*approach* to policy development and implementation which uses rigorous techniques to develop and maintain a robust [high quality] evidence base from which to develop policy options' (<http://www.defra.gov.uk/science/how/evidence.htm>).

The Forestry Commission is committed to creating a robust evidence base grounded on high quality science (Forestry Commission 2005); and many key stakeholder groups who contribute to decision-making in forestry arenas likewise commit themselves to using sound evidence. The British Ecological Society, for example, works collaboratively with the Centre for Evidence Based Conservation (CEBC) and funds research on systematic reviews (British Ecological Society 2004). Many of the CEBC consortium partners listed on their website are probably regular

contributors to discussions and consultations of forestry interest (<http://www.cebc.bangor.ac.uk/links.htm>).

Forestry as a discipline which operates at the interface between policy and the public over a number of disputed areas of science needs a broad and robust evidence base. What constitutes 'evidence' is the subject of much debate, philosophically, politically and even scientifically. Defra describes a 'tripartite' approach – hard data; analytical reasoning; stakeholder opinion – which is adapted from the evidence-based medicine (EBM) triad (Sackett, et al. 1996).



**Figure 1 Evidence-based policy making, adapted from medicine**

The Cabinet Office recognizes 4 prerequisites in an evidence based policy approach:

- Reviewing existing research
- Commissioning new research
- Consulting experts and/or consultants
- Considering properly costed and appraised options

### **Reviewing and commissioning research**

Medicine pioneered the use of systematic reviews as a way of increasing the quality of reviews of existing research. These are being used increasingly in other areas and have been found to be powerful tools for strengthening the science base, which forms one of the 3 key pillars of evidence. They do not replace other forms of evidence which are needed and they are not the 'dominant' form of evidence, but where science is called upon to provide answers to questions,

they do provide a robust and transparent means of evaluating *that which is already known* and they illuminate gaps in the knowledge base.

Systematic reviews examine the effects of management or policy interventions on individuals, populations or landscapes. But what interventions in forestry are of interest? What questions lend themselves to this approach? There are many examples in the UK alone of science failing to influence policy adequately. Reasons have been put forward to explain this – the science is irrelevant; the proposed solutions arising from the science are too expensive; society is not ready to accept the solutions; politicians are not willing to propose these solutions to the public. But these are problems of implementation. Some of the problems start well before this. According to Taylor (2005), the first rule in the game of making science more influential is to win the argument about what the problem is before trying to win the argument about what the solution is

Framing questions that relate to the policy challenges of the 21st Century will be fundamental to commissioning relevant research, and will make best use of limited funding resources. The key to finding solutions to the challenges facing forestry in the 21st Century is, as Taylor says, defining the problem (Taylor 2005). This means asking the right questions in an environment which encourages creative thinking. The T10Q project is focussed primarily at identifying policy-relevant questions in forestry.

Medicine introduced not only a systematic approach to its scientific knowledge base, with varying degrees of success and acceptability (Chalmers 2005, Chalmers, Altman 1995) but a new way of engaging the key actors in decision-making (Sackett et al. 1996). Forestry has not fully embraced this approach to evidence-informed policy making, but given the growing interest in looking at linkages from research out to policy and practice exemplified domestically by the Forestry Commission, and internationally by the work of the International Union of Forest Research Organisations (IUFRO), we feel it is timely to find out a little more about the networks of actors in the relatively small, but highly diverse UK forestry scene. The T10Q project fits within this wider interest in the potential for evidence based forestry.

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