

Science and Policy Integration at the Scottish Association for Marine Science

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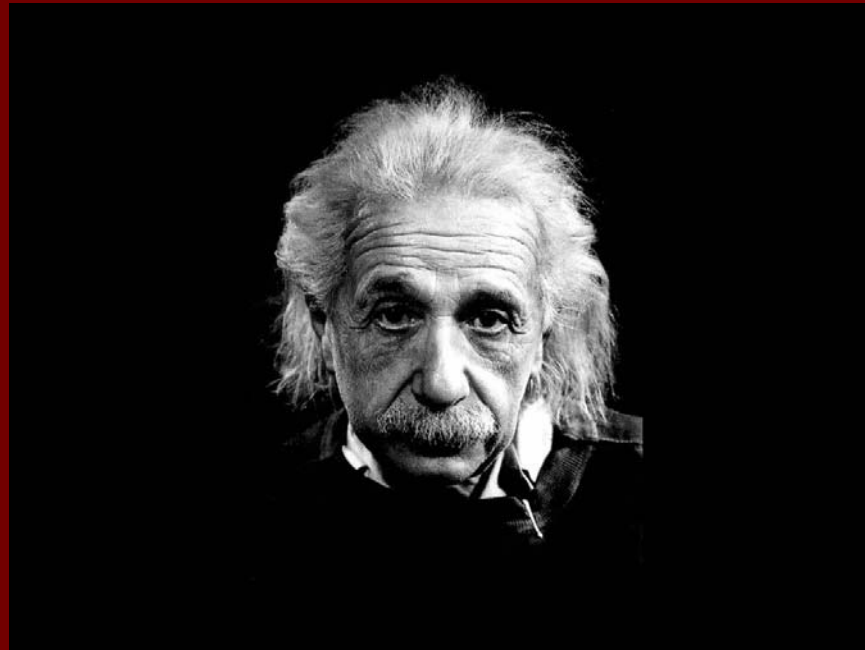


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'Politics is more difficult than physics'

- Einstein



What are we doing at SAMS?



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- Established CCOG to focus policy research & increase science-policy linkages in SAMS
- Established the cross departmental SAMS policy forum to integrate science and policy across departments and coordinates external policy responses
- Integrates public policy into the undergraduate scientific curriculum
- To be responsive to key policy developments within the UK and increase the policy influence of SAMS through research & engagement.

- Centre for Coastal and Ocean Governance (CCOG) research objectives:
 - Governance (State and non-State) of coasts and oceans from local to international scales. Specialisations: ICZM, national marine policies (UK & Scotland), Polar regions (Arctic focus), high seas & non-state governance.
 - Socio-economic assessment of maritime sectors and the interactions between them and the ocean environment. SSMEI initiative
 - Application & effectiveness of policy instruments in coastal and ocean systems: certification & eco-labelling, marine spatial planning, sustainability indicators.
 - Theoretical development of social science methods applied to marine and maritime systems: science-policy integration, conceptualising & analysing power, mapping governance & institutions.

Science Policy Integration – In Vogue?

- Funding bodies requesting policy outcomes (?) in research
- More competition for blue skies and increased opportunities for applied and integrated research.
- Increasing interest from scientists to implement research findings.
- Request for 'evidence based approaches' with varying degrees of success.

- We tend to approach science-policy integration from a disciplinary perspective. This can be problematic as it excludes the understanding of the different scales, knowledge systems, demands and opportunities inherent in each epistemic community.
- There is a great deal of misunderstanding in the system!

Agenda setting, provision
of funding



Scientific Domain

Rational
Positivist
Methodological
Theory building
Universal and general
Epistemic knowledge
Long term

Provision of 'reliable' knowledge



Government
science
Communication
Innovation
Problem solving

Policy Domain

Values driven
Political
Public support
Contextual
Mediation and negotiation
Short to medium term
Ethics
Power

Making decisions and action



Provision of 'reliable' knowledge

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PRESIDENTIAL ADDRESS

Ecology, politics and policy

JOHN H. LAWTON

*Chairman, Royal Commission on Environmental Pollution, Third Floor, 5–8 The Sanctuary, Westminster,
London SW1P 3JS*

Summary

1. ‘The British Ecological Society aims to promote the science of ecology through research and to use the findings of such research to educate the public and *influence policy decisions which involve ecological matters*.’ Yet, how successful have we been in influencing UK and EU environmental policy?
2. Many scientists hold to the ‘deficit model’ of turning science into policy, the view that if only politicians are told what the science reveals, ‘correct’ policies will automatically follow. Nothing could be further from the truth. Politicians have all kinds of reasons, some valid, some less valid, not to adopt what often seem to us to be common sense policies to protect the environment.
3. Here, I explore some of the successes and failures of ecologists to influence UK and European environmental policy, using acid deposition, the collapse of global marine fisheries, GM crops and climate change, carbon dioxide and ocean acidification as examples. I briefly review the extensive literature (largely ignored by natural scientists) on what social scientists have to say about evidence-based policy-making (or the lack of it) and why it often appears to be so difficult to persuade politicians to adopt sound environmental policies.
4. *Synthesis and applications*. Ecologists can, and do, influence government policy on the environment, but often via complex and iterative interactions that can be painfully slow, and may require fundamental changes in politicians’ belief systems, values and norms.

Key-words: acid deposition, marine fisheries, GM crops, carbon dioxide, policy formulation

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The Deficit Model

- Lawton (2007) discusses a 'faulty model' in many of our minds of how science is translated into policy – the linear model, which is roughly:



The assumption that good science translates directly into good policy is flawed.

Why?

- Policy formulation is a messy, iterative, and contested process
- Different individuals have different interests and perspectives that they will naturally attempt to protect and promote
- Involves not only science, but economics, cultural values, tensions between institutions, interpretations of what 'the science' tells us, power and vested interests.

Lessons.....

- Researching science-policy integration is not a defence of existing policy or institutions but a critique.
- Mix of descriptive and prescriptive approaches.
- **Myth 1:** Scientists are rational, calculating, value neutral beings purely focused on research.
- **Myth 2:** Decision makers & politicians are faceless bureaucrats or self interested power seekers!
- Capacity to work together relies on mutual understanding of disciplines, epistemologies, pressures and finding the common ground.
- Must recognise the realities that science and policy have fundamentally different epistemologies e.g. objectives, methods, decisions, & data. However there is considerable commonality between the communities.

Science and Policy integration....

Integration or co-operation?

A rusty squeaky gate.....

Or a well oiled revolving door....