

## **DINNER/DISCUSSION SUMMARY**

## What is the countryside for – food production or amenity value?

Held at The Royal Society on Wednesday 28th April, 2004

Sponsors:

Biotechnology and Biological Sciences Research Council Department for Environment, Food and Rural Affairs RCUK – Rural Economy and Land Use Programme

In the Chair: The Earl of Selborne KBE FRS

House of Lords

**Speakers**: The Rt Hon Alun Michael MP

Minister of State for Rural Affairs and Local Environmental Quality, Defra

**Professor Chris Pollock** 

Director, Institute of Grassland and Environmental Research

**Oliver Walston** 

Farmer, Thriplow Farms, Royston

In his talk Professor Pollock posed a range of questions: how the environmental footprint of efficient food production could be minimised, what extra price people would pay for food produced by sustainable methods in the UK, how much they would pay to avoid the short-term mining of agricultural resources in other countries, whether there would be enough land to feed a rising world population sustainably. In discussion it was asked how the debate he proposed could be set in motion. The international mechanisms for securing environmental equity, for example in the World Trade Organisation, were poor, and capitalism was good at discounting the future. Free trade was not always beneficial, and the WTO needed to look at its wider effects.

It was important to draw a range of interests into the discussion, but this was not easy. Most people attending public meetings on environmental issues in the countryside had nothing to do with farming. Another speaker saw the national parks as good places to debate the issues because farmers as well as other interests got involved and the national parks authorities had to balance the wishes of residents against wider concerns.

One speaker complained that Mr Walston had been too kind to organic farming in his talk. He had said that reliance on it would raise food prices, but in the speaker's view there were worse criticisms to be levelled at it. It was based on mumbo jumbo and was less effective than integrated farm management and no-till farming in reconciling production with the environment. The Government ought not to subsidise organic farming. Another speaker suggested that, even for those who did not believe in it, organic farming could have a value as a comparator.

Professor Pollock had shown an aerial photograph of an idyllic rural landscape in central Wales, pointing out that it was the result of management by farmers and contained no climax vegetation. In discussion it was observed that such management of the landscape would only continue if farmers made a profit. One speaker argued that farming and forestry were unique, as being the only economic activities that could deliver positive environmental benefits. It was also observed, however, that the nature of farmed landscape depended on what kind of farming was profitable. Sheep and orchards were to be seen in Herefordshire twenty years before, but now ploughed fields had taken over because farms were producing strawberries and raspberries in response to the demand for soft fruit all year round. Farming could only be influenced through commercial incentives.

A speaker suggested that it was possible to overplay the uniqueness of farming. The pressures on farmers to think laterally and be entrepreneurial were similar to those which faced people in an area where, for instance, the steel works which had been the major employer closed down.

Another contributor to the discussion was in the business of farming beef, sheep and tourists. A lot of farm land was now being bought by nonfarmers, and high-tech industries were contributing to the rural economy but perhaps not to the landscape. Another participant agreed that the landscape needed to be managed, but not necessarily as it had in the past. The Forestry Commission lost money on growing trees but made a profit from recreational land use. What mattered was to generate economic activity from land in a way which reduced the footprint of the activity. The outbreak of foot and mouth disease in 2001 had focussed attention on just how many people went to the country to walk.

Farming itself could serve different values: one organic farmer, for example, encouraged visits to the farm and was involved with education. A strategy for sustainable food production had to include economic sustainability and links to the wider community. Farmers should add value in return for higher spending on food. Conversely, it was argued, people needed to find ways to recognise the public good by paying for things that consumers wanted, and which it would not otherwise be profitable for farmers to provide. Thus at a recent conference it had been specified that produce from the area should be served at lunch. People would pay for quality or for identification with an area.

It was observed that there could be tensions between different subordinate uses of farmed land. Mr Walston had spoken of welcoming walkers on to his farm, but also had areas managed so as to encourage stone curlews and beetles. Walkers and wildlife did not necessarily get on well together. Overall, though, it was argued that it was worth pursuing the different uses even though beetles inevitably got trodden on from time to time.

A speaker observed that the Government put a great deal of money into advising developing countries on food security and the nutritional value of food, but the advice did not seem to be applied in Britain. In discussion it was noted that food supplies in the third world were precarious. "Just in time" was a good system for supplying Nissan but not for feeding people. One speaker reported that agriculture in Ethiopia was Old Testament-organic, with mineral shortages, soil erosion and a rapidly growing population to be

fed. Even in continental Europe, though, it was suggested that Ministers were more concerned about shortages of food than keeping on the right side of the farmers. A small drought in Eastern Europe the previous year had doubled the price of wheat. Applied research was needed in the UK. Another speaker advocated research into the food chain, to identify waste. It was noted that only about a third of the carbon which was fixed in photosynthesis ended up as food anyway, but later losses were still important and life-cycle analysis could be valuable.

The question was raised what impact genetic modification might have on farming, to the extent that it was permitted. One response was that GM technology was no different from the rifle or the Model T Ford: what you did with it was up to you. The Model T had killed a lot of people in the 1930s by running them over. Attitudes to GM technology were irrational. Using it to produce chickens which were resistant to avian flu would be condemned, yet vaccines against the disease were genetically modified. A farmer might dream of GM wheat that fixed its own nitrogen, or of elm trees resistant to dutch elm disease, but would not grow GM crops for fear of not being able to sell them.

The farm-scale trials of GM maize and oilseed rape nevertheless represented progress, because they asked questions about the relations between farming and the wider world. What mattered was not the technology but its impact on the environment. In fact it turned out that the worst and the best crop varieties, from the environmental point of view, were both conventional, yet modification of characteristics through traditional breeding was subject to minimal scrutiny.

It was argued that biodiversity, which was a major factor in the decisions on GM maize and oil-seed rape, called for further debate. Did it just mean keeping a lot of species alive, and how far should it be an ingredient in public policy?

Jeff Gill

Professor Pollocks presentation can be found on the Foundation's web site – www.foundation.org.uk

The Foundation for Science and Technology Tel: 020 7321 2220 Registered in England No 1327814 Registered Charity No. 274727