

**Improving the success of agri-environment  
initiatives:  
the role of farmer learning and landscape context  
or FARMCAT: Farmer context, attitude  
and training**

**James Bullock  
Centre for Ecology and Hydrology  
jmbul@ceh.ac.uk**



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# Co-Investigators

- **Matt Lobley** – Centre for Rural Research
- **Richard Pywell** – CEH
- **Jerry Tallwin** – Institute of Grassland and Environmental Research
- **Simon Mortimer** – Centre for Agri-Environment Research

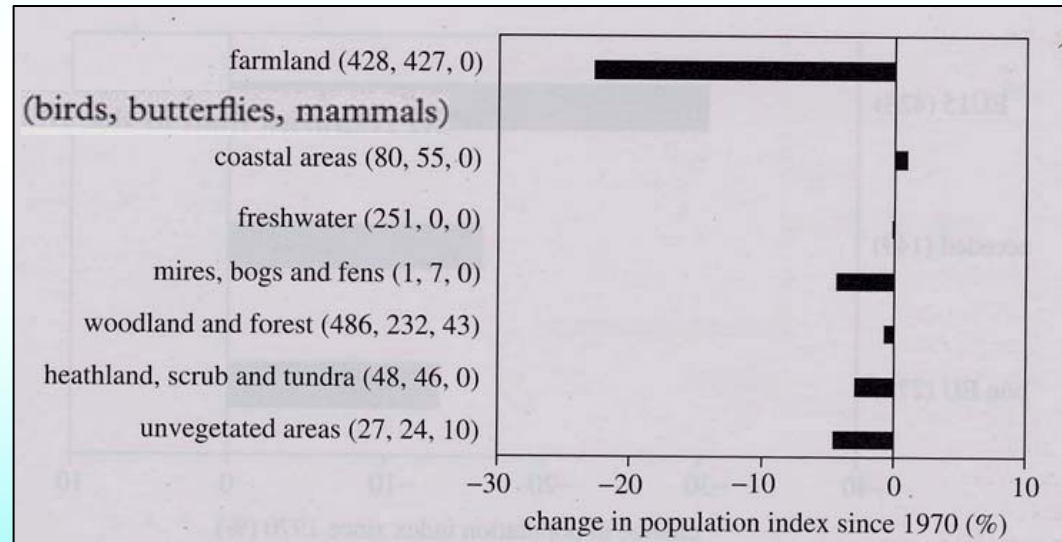
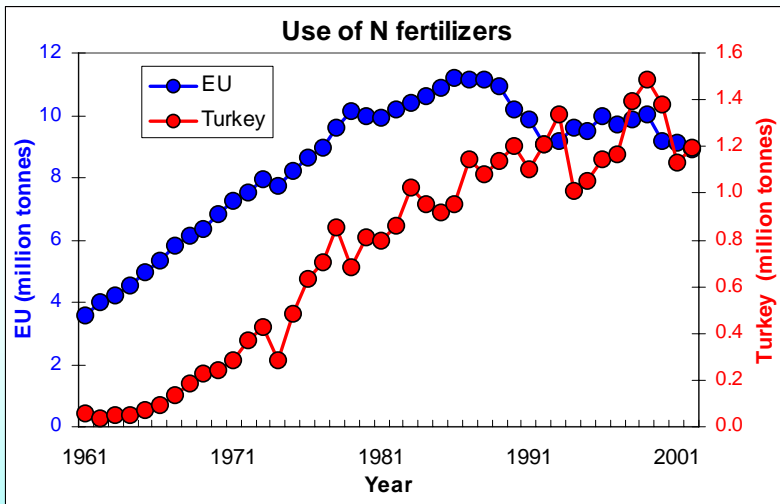


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# CAP

- Guaranteed prices, investment aid, etc
- Encouraged intensification of production?
- One factor in loss of farmland biodiversity



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# Agri-Environment Schemes

- EEC Regulation 2078/92 in 1992 – introduced requirement for EU member states to implement AES
- Pay income losses & costs
  - Less fertilizer, pesticides
  - Less intensive grazing, cutting
  - Maintaining & creating of habitats, food resources
- In England ESA & CSS – from 2005 ES



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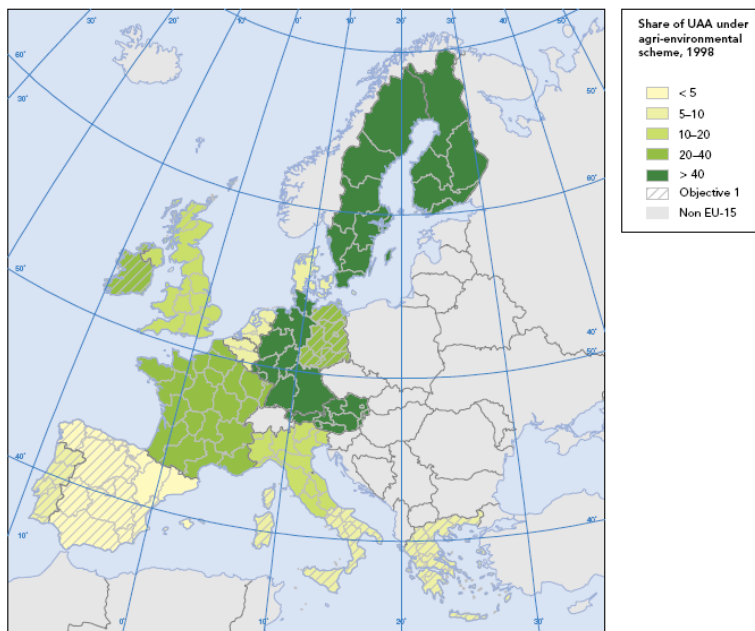


# Examples



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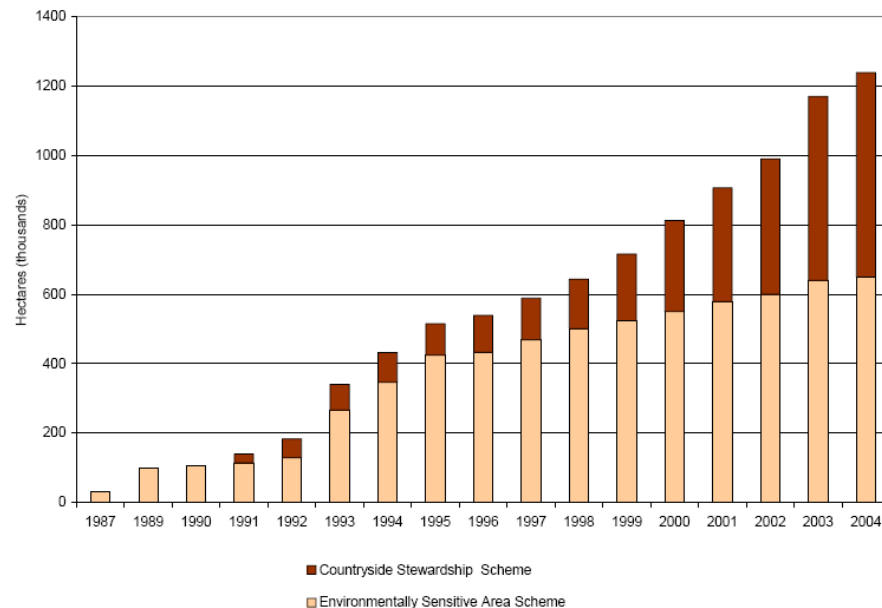
Figure 9 Share of utilised agricultural area under agri-environment schemes (1998 figures)



Source: EEA 2001, on the basis of data of the European Commission, DG Agriculture.

- EU in 1998
- AES implemented in 26 EU countries
- On 20% of agricultural land

Area of land under agri-environment scheme agreement in England 1987-2004



Source: Defra

- England in 2004
- AES implemented on 13% of agricultural land



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# AES do not always work

- Little work assessing effectiveness (EASY)
- Kleijn & Sutherland: +ve AES outcome
  - 6 of 14 plant studies (2 -ve)
  - 11 of 17 arthropods studies (3 -ve)
  - 4 of 19 bird studies (3 -ve)
- Sociological & Ecological reasons



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# Possible constraints on AES

- Prescriptions given to farmers are rubbish (unlikely)
- **Farmers do not use appropriate options**
- **Or do not apply options appropriately**
- **Species are not available to colonise new habitat**
- **There are landscape barriers to species' movement**



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# Farmer decision making & AES

- Whether to enter AES (well-researched)
- How to implement AES prescriptions
  - Mostly limited engagement with AES objectives
  - Or understanding of reasoning behind prescriptions
  - Unintentional breaches & corner-cutting
  - Problem of scheme based mostly on monetary incentives?



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# How to shift attitudes...

- ...to be more conservation-oriented?
- An important indicator of the effectiveness of AES
- By educational programmes
  - to push farmers from utilitarian towards conservation-oriented attitudes
  - to bring about attitudinal shifts
  - to bring about understanding why conservation actions are required as well as how to do them



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# Training



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# FARMCAT [www.ceh.ac.uk/farmcat](http://www.ceh.ac.uk/farmcat)

- 2 landscapes – grass (Devon) & arable (Bucks)
- In each 12 pairs of farms – trained vs untrained
- Explore farmer attitudes to AES & then responses to training
- Assess habitat quality of AES options
- Map landscape structure & target species
- Determine sociological & ecological success of AES over 5 years
- Stakeholder workshops – farmers, policy makers, etc



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