

UK-ADAPT

www.uk-adapt.org.uk

November 2006 Newsletter

This newsletter is the eighth of a series of monthly updates on the UK-ADAPT initiative. It is provided to all registered users on the UK-ADAPT website. Please forward to any colleagues that might be interested in UK-ADAPT and encourage them to use the website.

Overview

There has been limited activity on the UK-ADAPT website during November. We are still targeting key individuals from the research community to collate relevant diffuse pollution projects and it is hoped that more projects will be added to the website soon.

New Projects

There are 175 projects currently listed on the website. Please continue to review all diffuse pollution projects undertaken by your organisation since 2000 and consider registering them on UK-ADAPT. If anyone has a large number of projects to register, please contact Becky Humphrey for assistance on 01954 268267 or uk-adapt@adas.co.uk

The next UK-ADAPT workshop

Following the success of our 2006 workshop, we plan to hold another event in March 2007. The themes of the workshop are still being finalised, so if you have any suggestions, we would welcome your ideas. It is important that all projects on the UK-ADAPT website are updated before this event, in order to review the UK-ADAPT initiative accurately. Please review your projects and send suggestions for the workshop to uk-adapt@adas.co.uk

Upcoming Conferences and Events

- **SCI Conference: Deriving Maximum Benefits from Optimised farm Inputs**
20-21 March 2007, Robinson College, Cambridge, UK
Further Information: www.soci.org
Deadline for abstracts: 5th January 2007

UK-ADAPT Feedback

If you have any comments on the website or require assistance with registering and editing projects or updating contact details, please contact us at uk-adapt@adas.co.uk

Featured Case Study

Each newsletter features a flagship project that has recently been added to the UK-ADAPT website. This month we focus on **MOPS**, a field scale research project looking at mitigation options for phosphorus and sediment. If you would like your project to be featured in next month's newsletter, please contact www.uk-adapt.org.uk

FIELD TESTING OF MITIGATION OPTIONS FOR PHOSPHORUS AND SEDIMENT (MOPS)

The MOPS project has been set up to review and test the effectiveness of mitigation options to reduce losses of sediment and phosphorus from agricultural fields. The project team is John Quinton and Carly Stevens at Lancaster University, Martyn Silgram and Bob Jackson at ADAS, and Alison Bailey at University of Reading.

This project is testing a range of mitigation options at the hillslope scale which have the potential for reducing soil erosion and phosphorus losses from combinable crops. The management treatments reflect different levels of intervention and are suitable for inclusion under cross compliance and the Entry Level Scheme or Higher Level scheme options. Treatments include: minimum tillage, contour cultivation, tramline management, crop residue management and the use of beetle banks as vegetative barriers within hillslopes.

Field experiments are being conducted at three sites with contrasting soils:

- The Allerton Trust in Leicestershire – clay soil
- ADAS Rosemaund Farm in Herefordshire – silty clay soil
- Severn Trent Water's Old Hattons Farm in Staffordshire – loamy sand soil

At each field site, runoff is collected from unbounded hillslope segments of at least 300m². Runoff samples are analysed for total and dissolved phosphorus, sediment content and total nitrogen. Winter 2005/06 results demonstrate the importance of tramlines in sediment and nutrient transfer on all soil types. Using tramline disruption on the Rosemaund site appeared to result in significant reductions in both sediment and phosphorus in two events, and this effect will be investigated further across both light and heavy textured soils this winter.

Economic analysis, conducted by Reading University, is considering the costs associated with introducing and maintaining the mitigation practices and the effect of adopting mitigation options upon farm costs. This will enable the overall cost-effectiveness of different options to be assessed in a policy context.

The project is also investigating particle tracking techniques which have the potential to identify sediment and phosphorus source areas, and thereby support targeting of mitigation measures.

For further information please contact John Quinton J.Quinton@Lancaster.ac.uk

