

***the* RIVER RESTORATION CENTRE**

**RIVER RESTORATION AND GEOMORPHOLOGY TRAINING WORKSHOP  
BRITANNIA HOTEL, COVENTRY**

Overview

Participants will be introduced to Fluvial Geomorphology through 5 expert led tuition sessions. These will include sediment transfer, river stability and change, impacts on ecology and engineering, and data collection.

Short presentations are invited to either illustrate various examples of geomorphology in practice, or discuss current projects in need of geomorphological input. *[To ensure time-tabling and provision of adequate information for discussion please contact the Centre to propose possible discussion projects.]*

Participants, through group work will address a specific restoration/enhancement opportunity (lowland rural, lowland urban, upland rural). Group work will develop proposals for the subject reach and discuss decisions and rationale.

To provide an overview of the needs of different river types, group scenarios will be summarised, followed by the presentation of all three 'actual' case studies to ALL participants, outlining the geomorphological approach to the design.

*The focus of the day will be to emphasise the need for sound geomorphological assessment in river restoration. Participants will gain an understanding of the complexity of the fluvial system and be in a better position to recognise situations where there is the need to call upon expert geomorphological assistance.*

*Programme starts on next page.*

**Tuesday 24<sup>th</sup> April 2001 Three Spires Suite**

**20:00pm (for 20:30pm) Evening meal - residential delegates only**

<b>PROGRAMME</b>
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**Wednesday 25<sup>th</sup> April 2001 (Connaught Suite)**

**(Three Spires Suite)**

**9:30 Coffee and registration for workshop sessions**

**10.00 Introduction** Dr David Sear

**10:15 Tuition Sessions**

The basics of geomorphology

*Geomorphology in a catchment context*

Prof. Malcolm Newson

- The fluvial system
- Sediment transfer through catchments
- View: [Summary](#) - [Synopsis](#)

*The basics of river channel morphology and behaviour*

Prof. Chris Soulsby

- Stability of different rivers in different environmental settings
- Channel widening and braiding
- View: [Summary](#)

Linking geomorphology to nature conservation and engineering

*Geomorphology and ecology*

Dr. David Gilvear

- Geomorphic processes that control in-stream biota and riparian vegetation
- View: [Summary](#)

*Geomorphology and engineering*

Prof. Colin Thorne

- Sediment transport and engineering structures
- View: [Summary](#)

Geomorphology and data collection

*The need for and ways of obtaining relevant geomorphic data*

Dr. David Sear

- Existing geomorphic data held within organisations
- Methods of stream reconnaissance
- Specific information for channel design
- Sediment traps
- View: [Summary](#)

**11:30 Short presentations**

An opportunity for delegates to raise specific examples with the geomorphologists present. Discussing either current work in need of geomorphological input/assessing or presenting work where geomorphology has played an important role. Open

**12.10 General Discussion** Prof. Chris Soulsby

**12.30 Lunch**

**Delegates split into workshops**

**1.30 Workshops (Syndicate Rooms)**

These will centre on 3 case studies.

Workshop Group 1 - Lowland rural watercourse - restoring meanders and pools and riffles (**Courtyard Suite**) Dr David Sear

Workshop Group 2 - Lowland rural watercourse - restoring meanders and pools and riffles (**Pine Suite**) Prof. Malcolm Newson

Workshop Group 3 - Lowland urban watercourse - enhancing an urban watercourse (**Connaught Suite**) Dr Helen Dangerfield  
Dr Kevin Skinner

Workshop Group 4 - Upland rural watercourse - creation of an environmentally acceptable channel (**Cavendish Suite**) Dr. David Gilvear  
Dr. Katherine Leys

Details will be circulated and a presentation of the problem will be given by the facilitator. Small workgroups will be charged with assessing and designing the project.

**2:30 Group presentations over Coffee**

Each workgroup will present their proposals and the rationale behind their decisions.

**Delegates reconvene**

**3:15 Project reporting and reality** (**Connaught Suite**)

The workshop leaders will summarise the groups proposals. The workshop leaders will present a brief report of what actually happened, successes and failures.

Lowland Rural Dr. David Sear  
Lowland Urban – [Workshop](#) – [Synopsis](#) Dr Helen Dangerfield  
Upland Rural – [Workshop](#) – [Synopsis](#) Dr. David Gilvear

**4.30 Summary**

The need for sound geomorphological assessments in river restoration.

Prof. Malcolm Newson

**4:45 Close**

Martin Janes

Speakers/facilitators

Dr David Sear	(University of Southampton)
Prof. Malcolm Newson	(University of Newcastle)
Prof. Chris Soulsby	(University of Aberdeen)
Dr David Gilvear	(University of Stirling)
Prof. Colin Thorne	(University of Nottingham)
Dr Helen Dangerfield	(Babtie Group Ltd)
Dr Kevin Skinner	(University of Nottingham)
Dr Katherine Leys	(Scottish Natural Heritage)