

Environmental data

WHY: IS ACCESS TO INTEGRATED ENVIRONMENTAL DATA MORE IMPORTANT THAN EVER?

BECAUSE: IT UNDERPINS SOCIETY'S RESPONSE TO RAPID ENVIRONMENTAL CHANGE

Protecting the environment and our place within it requires detailed understanding and recording of our global atmosphere, water and land-based interactions.

Cross-disciplinary science is needed to develop robust solutions to worldwide problems, and this requires access to diverse, integrated datasets.

Novel technologies are producing ever-increasing amounts of data and new methods of analysis. This brings unprecedented opportunities for integrated research, but also creates significant challenges in handling datasets and maximising their use by research, policy and business communities.



Centre for Ecology & Hydrology
NATURAL ENVIRONMENT RESEARCH COUNCIL

enquiries@ceh.ac.uk
www.ceh.ac.uk



NATURAL ENVIRONMENT RESEARCH COUNCIL

Environmental data



DELIVERING IMPACT

CEH hosts the Environmental Information Data Centre, the NERC centre for terrestrial, freshwater and land-atmosphere data. This brings together wide-ranging, nationally-important datasets and expertise in managing environmental data including the Biological Records Centre, the National River Flow Archive and the Environmental Change Network.

Improving access to data: CEH's Information Gateway enables users to access CEH data holdings and similar datasets worldwide.

Managing increasing volumes of data: CEH provides software and support for NERC's Environmental Bioinformatics Centre, which enables scientists worldwide to interpret the vast wealth of data generated in genetic and molecular analyses.

Using datasets together: CEH is developing new standards and approaches to facilitate data integration aimed at addressing complex, multidisciplinary environmental questions.

Meeting opportunities arising from new technologies: The field-based electronic data-capture systems developed during Countryside Survey 2007 saved over £1 million, improved data quality and accelerated reporting to policy-makers by 12 months.

FUTURE CHALLENGES

To make integrated monitoring, modelling and experimental data readily accessible by the public, industry, government and international bodies.