

JNCC

# Nature *News*

The national and international conservation digest

Issue 14: Spring 2007

## UK Overseas Territories a conference on conservation



Tracking mammals  
update



Safeguarding  
Species

### PLUS

- + Top honours for JNCC leaders
- + Applying the ecosystem approach
- + Environmental economics
- + Flagging the Fens

# Featured in this edition...



**UK Overseas Territories**  
 JNCC staff presented environmental economics tools at *Biodiversity that Matters*; a conference on conservation in the UK Overseas Territories and other small island communities. The conference was organised by the UK Overseas Territories Conservation Forum, with the support of the Overseas Territories Environment Programme.

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## Conservation Conversation

Q & A with independent JNCC member Professor Peter Doyle.

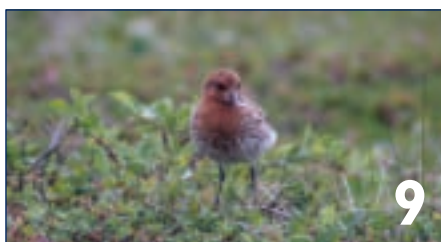
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UKSeaMap report published. Broad-scale ecological maps of seabed and water column for all UK waters.

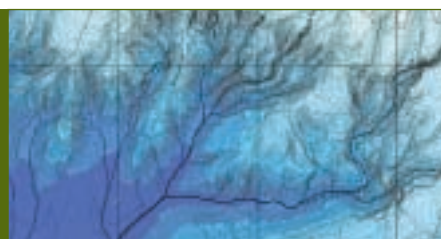
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This is one of a range of publications published by the Joint Nature Conservation Committee. JNCC advises the UK Government on national and international wildlife and conservation issues on behalf of the Countryside Council for Wales, English Nature, Scottish Natural Heritage and the Council for Nature Conservation and the Countryside.

*Nature News* is published three times a year, and informs its readers of the current work and projects being carried out by JNCC. Comment and feedback is much appreciated, so please email: [communications@jncc.gov.uk](mailto:communications@jncc.gov.uk), tel: +44 (0)1733 866839, fax: +44 (0)1733 555948 or write to: JNCC, Monkstone House, City Road, Peterborough PE1 1JY, UK.

You can find out more about the work of the JNCC by visiting our website at [www.jncc.gov.uk](http://www.jncc.gov.uk)

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**Front cover image:** The overall winner in JNCC's photographic competition 2006 was the work of Nature Conservation Adviser Helen Baker. *Desert defence* (Chisos Mountain Agave, Big Bend National Park, Texas, USA). © Helen Baker

# Chairman's Intro



© JNCC

**Last October, the Natural Environment and Rural Communities Act came into force, modifying the constitution and functions of JNCC. Importantly, the Act incorporated the Council for Nature Conservation and the Countryside (the Northern Ireland statutory advisory body) as a fourth constituent body of JNCC, alongside the Countryside Council for Wales, Natural England and Scottish Natural Heritage. In parallel with this, the previous references to Great Britain in relation to our advisory, information and common standards functions were replaced by references to the United Kingdom.**

The composition of the Joint Committee was also modified, with two members being appointed from each of the four constituent bodies, and the number of independent members being increased from three to five. These changes will improve the balance of the membership of the Committee and we very much welcome them. In line with Government policy, JNCC is now required to carry out its nature conservation functions having regard to the desirability of contributing to sustainable development, thus placing nature conservation in the wider context of society's needs.

Indeed, JNCC has already been involved in more work with a socio-economic focus, for instance coordinating projects in partnership with the Caribbean Overseas Territories. Part of our new strategy addresses the need to relate nature conservation to social and economic considerations, such as providing an overview on the ecosystem approach as a means for achieving sustainable development, and developing the tools needed for its implementation. Environmental economics workshops for staff, enabling them to prioritise future work in this area, have been a recent fruitful development.

A major success has been the Mapping European Seabed Habitats (MESH) project which has now been extended. A large part of this work for JNCC will comprise a deep-water survey at the edge of the continental shelf in the south-west of the MESH project area, where JNCC's offshore Natura 2000 programme has identified an area of potential cold-water coral reef habitat.

Adrian Darby OBE  
Chairman, JNCC

## NEWS

### New Committee members welcomed at December meeting

**David Pritchard and Professor Michael Usher have been appointed as independent members of the JNCC.**

Adrian Darby OBE, Chairman of JNCC, welcomed the appointment at JNCC's meeting at Monkstone House on 7 December 2006: "Together with my Committee colleagues I extend a warm welcome to Michael and David. It is a testament to the expanding profile of JNCC that two such renowned experts have been prepared to join us. They will help promote and enhance nature conservation not just at the UK level but on a global scale as well. I am delighted that future meetings of our Committee will be enriched by their valued input."



David Pritchard. © JNCC

David and Michael are experts in international biodiversity and climate change respectively, and it was these skills that were of particular interest to JNCC as they will broaden the experience of the Committee in these areas.

David is currently International Treaties Adviser at the Royal Society for the Protection of Birds and Birdlife International. He has been involved, at a high level, in a range of international nature conservation issues, through his work in a range of multilateral environmental agreements.

Michael Usher was previously Chief Scientist of Scottish Natural Heritage and an English Nature Council member. He is currently a trustee of the Royal Botanic Garden Edinburgh and of the Woodland Trust. An experienced scientist, academic and conservationist, Michael has experience of working on the implications of climate change for nature conservation.



Professor Michael Usher. © JNCC

# Letters after their name



Dr Phil Boon (left) and Professor Des Thompson. © JNCC

## Top honours for JNCC LCN leaders

**Two of the chairmen of JNCC's Lead Coordination Networks (LCNs), which deliver UK and international advice on habitats, have been honoured for their scientific work.**

Professor Des Thompson, the Uplands LCN chair, is to be awarded a Doctor of Science (DSc) degree by the University of Nottingham. This is in recognition of his substantial, sustained and original contributions to the advancement of learning, notably in the fields of nature conservation and the ecology of the British uplands.

Dr Phil Boon, the Freshwater LCN chair, was recently made an Honorary Professor by the University of Stirling for his leadership of freshwater conservation issues, most notably his work in support of the Water Framework Directive, which involves close working with colleagues around the UK and in Europe.

Between them, Phil and Des have produced 15 books, which include *Tundra Plovers*; *Alpine Biodiversity in Europe*; *The Fresh Waters of Scotland*; and *Global Perspectives on River Conservation*, and are editors/editorial board members of three international journals. They work as Principal Advisers for Scottish Natural Heritage, and share a desire to see more communications within the conservation agencies written in plain English.

 Des Thompson  
Uplands LCN Chair  
Tel: +44 (0) 131 446 2419  
Email: des.thompson@snh.gov.uk

 Phil Boon  
Freshwater LCN Chair  
Tel: +44 (0) 131 446 2412  
Email: phil.boon@snh.gov.uk

# Small can be beautiful

*Applying the ecosystem approach to protected areas in the context of small islands*

**JNCC's vision is for a healthy environment in which people and wildlife live together in an integrated manner. It is founded on the adoption of an ecosystem approach as a means for achieving sustainable development. The ecosystem approach developed by Parties to the Convention on Biological Diversity (CBD) seeks to ensure the demands we place on the environment are not so great that it can no longer provide essential goods and services, and so deliver benefits for all.**

In December 2006 the CBD, along with the United Nations University, the World Conservation Union (IUCN) and JNCC held a workshop on applying the

ecosystem approach, the primary framework for action within the CBD, in the planning, establishment and management of protected areas in and around small islands. The meeting, held in Bangkok, brought together a wide range of specialists from the Pacific, Caribbean and south-east Asia to discuss what tools and advice are needed by small islands to use the ecosystem approach.

Diana Mortimer, JNCC's Sustainability Officer, provided an overview of the ecosystem approach and the tools needed for its implementation. This was based on two years work with the CBD Secretariat to create a sourcebook which details how the ecosystem approach can be applied.

The workshop reached several conclusions:

- Communities must be involved in decision making on the use of resources which are critical to their survival. This allows expression of free will which fosters ownership, promotes consensus and minimises conflict.
- The vulnerability of island ecosystems highlights the need for an integrated, holistic management approach. Management needs to go beyond protection of specific species or ecosystems to consider impacts on adjacent areas and systems. Recognition of ecosystem limitations and functioning promotes realistic goal-setting and sustainable use.
- Understanding an ecosystem in an economic context allows for integration of economic issues into management. This can enhance compliance and encourage buy-in by local stakeholders, create credibility, build trust and boost success.

For further information on the ecosystem approach see the CBD's *Ecosystem Approach Sourcebook* ([www.biodiv.org/programmes/crosscutting/ecosystem/sourcebook/home.shtml](http://www.biodiv.org/programmes/crosscutting/ecosystem/sourcebook/home.shtml))

You can add a case study and show the world how your work contributes to the CBD's objectives and sustainable development.



In a break from proceedings, delegates took a low-tide walk on the south-east coast of Jersey. © Diana Mortimer/JNCC

# Exporting environmental economics

*JNCC gives advice on the UK Overseas Territories*

and 'Environmental Economics'. There was tremendous enthusiasm among participants to learn about and apply the tools of environmental economics within the context of the ecosystem approach. In particular, by developing a toolkit for the economic valuation of the environment to support effective, integrated and sustainable decision-making in the Overseas Territories.

making in the Caribbean Overseas Territories will reflect the true economic value of the environment and address the root causes of environmental degradation. This should help to implement many of the guiding principles of the Overseas Territories' Environment Charters and related strategies and action plans.

**In October, four staff represented JNCC at Biodiversity that Matters; a conference in Jersey on conservation in the UK Overseas Territories and other small island communities. Organised by the UK Overseas Territories Conservation Forum ([www.ukotcf.org](http://www.ukotcf.org)), with the support of the Overseas Territories Environment Programme (OTEP), the conference was hosted by the Jersey conservation bodies.**

During the conference, poster presentations were displayed by JNCC on 'Sustainability and the Ecosystem Approach'

In response to these needs, and in line with the strategic direction agreed by the Joint Committee, JNCC is establishing a project, Environmental Economics with Overseas Territories in the Caribbean, in partnership with the Caribbean Overseas Territories, particularly Bermuda, the Cayman Islands, and Montserrat. The project will enable stakeholders to generate, understand and apply robust information on the value of ecosystem goods and services in the context of making decisions on alternative development and policy options. The long-term goal is that policy and decision

The project will emphasise capacity building; initially there was particular interest in the economic valuation of the environment in small island contexts. This first stage of tool development is already underway, jointly funded by JNCC and OTEP. There are also plans to organise training workshops and help Overseas Territories to gain practical experience of applying environmental economics to local contexts.

 Emily McKenzie  
Environmental Economics Adviser  
Tel: + 44 (0) 1733 866918  
Email: [emily.mckenzie@jncc.gov.uk](mailto:emily.mckenzie@jncc.gov.uk)



JNCC's Sustainability Officer, Diana Mortimer (second row, third from right), presented an overview of the ecosystem approach at the meeting in Bangkok.

- Taking into account spatial and temporal scales promotes actions that minimise degradation caused by any delays. This allows forward planning for the sake of future generations, and reduces the negative impacts on adjacent ecosystems.

The outcomes of the workshop will be used to create a manual for practitioners. Although aimed at protected areas on small islands it will be useful for anyone seeking a sustainable approach to nature conservation. The outcomes will also be used for the development of an in-depth review of the

ecosystem approach to be presented at the next meeting of the CBD's Parties.

 Diana Mortimer  
Sustainability Officer  
Tel: + 44 (0) 1733 866857  
Email: [diana.mortimer@jncc.gov.uk](mailto:diana.mortimer@jncc.gov.uk)



JNCC staff put their practical skills to use at Flag Fen. © JNCC

# Flagging the Fens

*JNCC staff get their hands dirty in practical conservation initiative*

**JNCC is charged with carrying out its nature conservation functions having regard to the desirability of contributing to the economy and society. This sustainable development context is at the heart of the Committee's current work to develop a UK vision for nature conservation, acknowledging that, in the future management of our landscapes and urban areas, nature conservation will be closely linked to historic, cultural and aesthetic values, and to the wider needs of society.**

In September 2006, JNCC had an opportunity to apply some of its thinking in a very practical way. Peterborough, in which our headquarters are located, is a flourishing multi-cultural city of 168,000 people which dates back to the founding of a Saxon abbey in the 7th century. Before that, the Roman town of Durobrivae, the centre of a thriving pottery industry, was located to the west of the modern city, while, to the east, the fens provided human communities with grazing, thatch, wood, fish and wildfowl for thousands of years.

A remarkable archaeological site, Flag Fen is located on the outskirts of modern Peterborough. Hidden within the peat, is a palisade comprising five rows of wooden posts extending one kilometre into the Fens, and also an extensive timber platform. The palisade and platform were constructed in the Bronze Age, between 1350 and 950 BC. Their purpose is still uncertain, but, beside them, the Bronze Age people made offerings to the spirit world, casting domestic and hunting implements into the dark water. As a result of the drainage of the fens, the wooden structures are in danger of drying out and crumbling, and part of the area has been re-flooded to halt this process. The resultant site is a wonderful mix of archaeological excavation, prehistoric reconstruction, museum and restored wetland. It also provides ecological support to the nearby Nene Washes, an important waterfowl area.



Although a major educational and recreational asset for the people of Peterborough, funds for the upkeep of Flag Fen are limited. JNCC staff spent a day last September helping to renovate former garden areas, and erect picnic tables, to provide extra facilities for children taken to the site from the city's schools. Flag Fen's team were delighted with JNCC's contribution to its work, and, for JNCC, it provided a unique opportunity to help its local community enjoy a fascinating outdoors experience and to link up with their local wildlife and history.

 Kirsty Meadows  
Communications Officer  
Tel: +44 (0) 1733 866886  
Email: [kirsty.meadows@jncc.gov.uk](mailto:kirsty.meadows@jncc.gov.uk)

# National Biodiversity Network at a crucial phase

In 1995, the UK Biodiversity Steering Group recommended establishing a co-operative network of biodiversity databases to improve the availability of the enormous volume of biodiversity data collected by volunteers and professionals across the UK every year. Work, led by JNCC, to establish such a National Biodiversity Network (NBN) proceeded, and, in 2000, the NBN Trust was formed with representatives from a wide range of partner organisations. The NBN's development was in response to the recognition that wide access to biodiversity data would provide a solid evidence base for conservation action at all levels.

Within JNCC, the key use of the data made available through the NBN will be in

detecting changes across a wide range of species groups and relating these to potential drivers of change through integration with other geographical datasets. The NBN also has the potential to provide front-line support for conservation action throughout the UK, enabling planning and management decisions to be taken on the basis of the best available data.

Since its inception, the successes of the NBN have been considerable. The volume of data available through the NBN Gateway ([www.searchNBN.net](http://www.searchNBN.net)) now exceeds 20 million records, and the level of use it receives is growing very rapidly. Work is currently underway to enable data and reports available through the Gateway to be integrated seamlessly into other websites and systems. The NBN is also a major contributor to the Global Biodiversity Information Facility, an



international organisation that is working to make the world's biodiversity data accessible anywhere in the world.

At a recent meeting the Joint Committee applauded the progress made by the NBN to date, but recognised that it was entering a critical period. If it is to be the data supplier of first choice, and achieve its full conservation potential, the NBN needs to provide access to many times its current volume of data. This will mean mobilising the data held, for example, in many Local Record Centres and in other biodiversity databases that currently do not contribute to the NBN. It will also mean ensuring that the NBN Trust is sufficiently resourced to carry out the work that will be required to achieve this. The Joint Committee agreed to increase its support for the NBN, and to work actively with the NBN Trust, partner organisations, and Government to ensure these goals are achieved within a very few years.

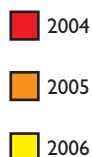
## NBN Gateway tracks new arrival

The NBN Gateway is ideal for showing the current distribution of species that are spreading or declining. The Harlequin Ladybird arrived in Essex in 2004 and since then its spread has been recorded by a special scheme using NBN Gateway technology. A website gives rapid feedback to volunteer recorders ([www.harlequin-survey.org](http://www.harlequin-survey.org)). Hence, likely areas can be searched for this invasive species, which has the potential to reduce the numbers of some native ladybirds. In addition, range expansions driven by climate change (for groups such as butterflies) are also readily apparent from maps available on the NBN Gateway. Using the internet speeds up data delivery to a wide range of users, for science, policy and decision-taking purposes.

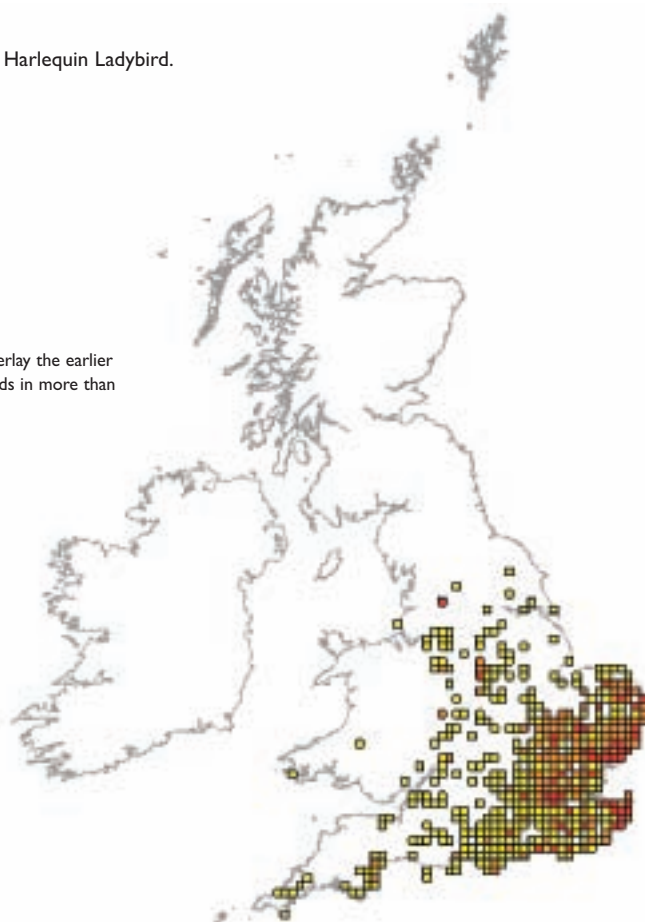
## 10km squares with records for *Harmonia axyridis* (Harlequin Ladybird) in Great Britain and Ireland

Includes the following taxa: Harlequin Ladybird.

10km square legend



Note: the most recent dates overlay the earlier dates where squares have records in more than one date class.



# Albatross report takes flight

## *Action to safeguard endangered species*

Albatrosses and their slightly smaller relatives are one of the most threatened bird groups on the planet, based on internationally agreed standards for conservation assessment. The UK has a particular responsibility for conserving these giants of the seabird world as many nest on UK's Overseas Territories in the south Atlantic and feed in waters nearby. Globally the greatest threat to albatrosses is their accidental capture on fishing lines or collisions with trawl wires. The rate of reproduction of albatrosses is low, hence additional mortality can have a very adverse effect on populations. Albatrosses range throughout the Southern Ocean and further north in the Pacific, so their conservation has to be a global effort. Many of the states in the range of albatrosses have therefore drawn up and started to implement the Agreement on the Conservation of Albatrosses and Petrels (ACAP). Countries that are party to ACAP meet regularly to discuss common cooperative needs and to agree on actions or initiatives to be taken. Mark Tasker of JNCC is chair of the Advisory Committee to ACAP. This Committee meets annually.

In order to understand and prioritise the work in UK and our Overseas Territories, a workshop was held in Stanley (Falkland Islands) in March 2006. The workshop was organised by BirdLife International and Falklands Conservation, with funding from the Foreign & Commonwealth Office, the Overseas Territories Environment Programme and the Falkland Islands Government. JNCC funded the production of the report of the workshop.

Key actions agreed included:

- More effective engagement by the EC and UK (on behalf of its Overseas Territories) in Regional Fishery Management Organisations. These organisations have the potential to regulate the environmental impact of fisheries, including for seabird interactions.
- Appointment of a dedicated person in the UK to represent Overseas Territories on ACAP and fisheries issues, particularly the environmental aspects.
- Establishment of an effective fishery protection regime for the Tristan da Cunha group.
- Greater protection to be given for breeding sites, including extension to adjacent marine areas, via appropriately managed marine protected areas.
- Improved biosecurity measures to prevent introduction of pests and diseases, including within island groups.
- Programmes implemented to eradicate rodents from breeding sites.

Further information on albatross conservation is available from ACAP ([www.acap.aq](http://www.acap.aq)).

The report of the workshop in Stanley is available from Falklands Conservation, 1 Princes Avenue, Finchley, London N3 2DA, price £10. Also available electronically ([www.falklandsconservation.com](http://www.falklandsconservation.com)).

 Mark Tasker  
Head of Marine Advice  
Tel: +44 (0) 1224 655701  
Email: [mark.tasker@jncc.gov.uk](mailto:mark.tasker@jncc.gov.uk)



Greenland white-fronted geese on their autumn staging areas in western Iceland. © Chris Wilson.

Within the UK, the Wildfowl and Wetlands Trust/JNCC Goose & Swan Monitoring Programme (GSMP) monitors internationally important populations of swans and geese during the non-breeding season. An extensive network of skilled volunteers collects annual data on numbers, distribution and productivity. GSMP then collates, analyses and publishes this information so that governments, conservation organisations and others have ready access to a broad range of information to help decision making. GSMP publishes most of its reports online, which means information can be updated rapidly, and there is also a quick reference guide to the status of goose and swan populations.

Some geese and swans occur in very large numbers in some areas and can cause damage to autumn-sown arable crops; GSMP data provides context about local populations that can help in managing birds in these problem areas. Several species are quarry species and GSMP is important in helping detect declines in harvested populations – which can then be investigated to reveal underlying causes. Climate change is affecting our bird populations and GSMP helps us understand distributional shifts that might be linked to this, for example, the current decline in European white-fronted geese in Britain is in large part due to climate change. GSMP also follows the fortunes of non-native geese and swans in the UK and will provide an early warning of possible problem (invasive) species.

**For more information see:**

*Waterbird Population Estimates 4* ([www.ramsar.org/wn/w.n.wi\\_wpe4\\_announce.pdf](http://www.ramsar.org/wn/w.n.wi_wpe4_announce.pdf))

*Waterbirds around the world* will be available from 12 March 2007, and will be featured on our website ([www.jncc.gov.uk/worldwaterbirds](http://www.jncc.gov.uk/worldwaterbirds))

GSMP website ([www.wwt.org.uk/Research/Monitoring](http://www.wwt.org.uk/Research/Monitoring))

 David Stroud  
Senior Ornithological Adviser  
Tel: +44 (0) 1733 866810  
Email: [david.stroud@jncc.gov.uk](mailto:david.stroud@jncc.gov.uk)

 Helen Baker  
Nature Conservation Adviser  
Tel: +44 (0) 1733 866816  
Email: [helen.baker@jncc.gov.uk](mailto:helen.baker@jncc.gov.uk)

# Monitoring millions of waterbirds

Lying on important migration routes, and as a major wintering area for wildfowl and waders, the UK has a long history of international collaboration in waterbird conservation. Indeed, many of the basic techniques of waterbird research and conservation were pioneered in the UK.

This work continues through JNCC's long-term partnership with Wetlands International, which supports several aspects of international waterbird surveillance and conservation.

Under these auspices, the fourth edition of *Waterbird Population Estimates* has recently been published, a publication based on annual monitoring of millions of waterbirds. The review summarises international population estimates and trends of 878 waterbird species. The new edition reveals a decrease in waterbird populations since the third edition (2002). At global level, 44% of populations for which trend data are available are decreasing or have become extinct, 34% are stable, and 17% are increasing. Asia is the continent where concern is greatest as 62% of populations there are now decreasing or have become extinct: only 10% show an increasing trend. In Oceania, one in six species have already become extinct.

Similar conclusions are reached in *Waterbirds around the world*, a massive book derived from the Edinburgh Global Flyways Conference organised jointly with Wetlands International, and the UK and

Dutch governments in April 2004. The 940 page publication will be launched on 12 March in The Hague, Netherlands, with a Ministerial call for concerted action to address the problems facing waterbirds.

The headline messages stressed the need to "Underpin future conservation decisions with high-quality scientific advice drawn from coordinated, and adequately funded, research and monitoring programmes notably the International Waterbird Census", and to "Develop policy-relevant indicators of the status of the world's wetlands, especially in the context of the 2010 target, using waterbird and other data generated from robust and sustainable monitoring schemes." To this end JNCC is working with Wetlands International and other stakeholders to develop a more sustainable, long-term funding regime for monitoring at international scales.





The wood mouse *Apodemus sylvaticus* is one of our most common and widespread native mammals. It is an important prey species and potential indicator of environmental change, and is included in the small mammals pilot survey. © naturepl.com

# We know where you are, we know how you live...

*New survey in Tracking Mammals Partnership 2007 update*

**The Tracking Mammals Partnership (TMP), an initiative coordinated by JNCC to provide population trends and distribution information for UK mammals, is entering its fifth year. The TMP continued to grow in 2006 with 25 organisations now participating. The newest member is Defence Estates, the land management agency for the Ministry of Defence, one of the largest land-owning bodies in the UK. Defence Estates has about 170 conservation groups actively contributing to national schemes in support of their Biodiversity Action Plan, so they are a very welcome addition to the TMP.**

**The TMP website, hosted by JNCC, experienced a major update in 2006 with the addition of new reports on individual schemes, information on surveys and volunteer participation and a summary results page. A 2007 update on surveys will be published shortly.**

The TMP continues to provide widespread coverage of more than 50% of terrestrial mammals, and to enhance species coverage where possible. JNCC, in partnership with The Mammal Society, is trialling a two-year small mammal surveillance pilot, which could deliver trend information for up to 14 species of shrews, voles and mice. Small mammals have potential to act as indicators of environmental pressures and surveillance of this group would enhance the new JNCC strategy for surveillance, reporting and

research. We are also continuing to support surveillance of species of conservation concern and await the recommendations of a two-year pilot assessing the best structure and methods for a UK red squirrel surveillance scheme.

Other schemes continue to deliver good data on a range of species. We are not detecting any dramatic changes at present, but building a comprehensive picture of mammal population changes over time. With the increasing body of data from mammals, in conjunction with other species and potentially habitat surveillance, we will be in a good position to say not only what is happening to biodiversity, but to begin to explain why changes might be occurring.

TMP results have been very useful in informing other areas of work in 2006, contributing greatly to decisions on which mammals are conservation priorities in the extensive UK Biodiversity Action Plan priorities review and informing the reporting on conservation status of European protected species.



Jessa Battersby  
Tracking Mammals Project  
Coordinator/Species Adviser  
Tel: + 44 (0) 1733 866808  
Email: [jessa.battersby@jncc.gov.uk](mailto:jessa.battersby@jncc.gov.uk)

**For further information ([www.trackingmammals.org](http://www.trackingmammals.org))**

# The key to our blue and pleasant land

## *UKSeaMap report and webGIS published*

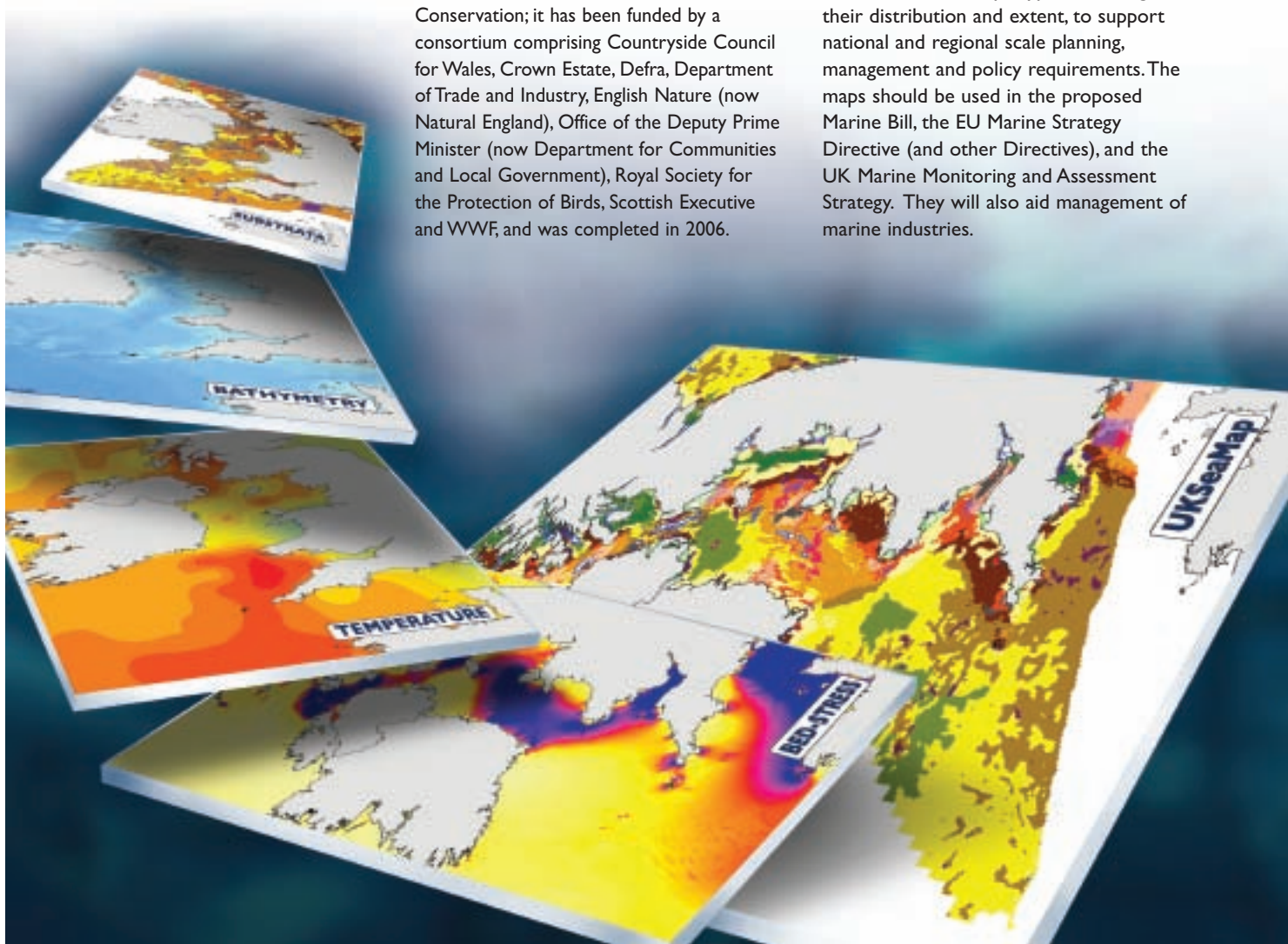
**The report of the UKSeaMap project was released in January 2007 and accompanies a bespoke web-based GIS (Geographical Information System) which displays the data and maps generated by the project ([www.jncc.gov.uk/UKSeaMap](http://www.jncc.gov.uk/UKSeaMap)).**

Following the successful development in 2004 of a marine landscape map for the Irish Sea as part of the Irish Sea Pilot, JNCC has now developed broadscale ecological maps of the seabed and water column for all UK waters as part of the UKSeaMap project. This work fulfils a key recommendation of the Defra-led Review of Marine Nature Conservation; it has been funded by a consortium comprising Countryside Council for Wales, Crown Estate, Defra, Department of Trade and Industry, English Nature (now Natural England), Office of the Deputy Prime Minister (now Department for Communities and Local Government), Royal Society for the Protection of Birds, Scottish Executive and WWF, and was completed in 2006.

Our knowledge of marine habitats and their biology over vast areas of UK seas is extremely sparse; by using available geological, physical and hydrographic data it has been possible to model the distribution of seabed and water column features (the mountains and valleys of the sea) to produce the first marine landscape maps for UK waters. The maps have been validated against available biological data to test their ecological validity.

The maps' primary purpose is to provide a national and regional perspective on the UK's marine landscape types, including their distribution and extent, to support national and regional scale planning, management and policy requirements. The maps should be used in the proposed Marine Bill, the EU Marine Strategy Directive (and other Directives), and the UK Marine Monitoring and Assessment Strategy. They will also aid management of marine industries.

 David Connor  
Head, Marine Habitats Team  
Tel: +44 (0) 1733 866837  
Email: [david.connor@jncc.gov.uk](mailto:david.connor@jncc.gov.uk)



# Another fine MESH!

## Seabed mapping project supports Natura 2000 programme

**With the Mapping European Seabed Habitats (MESH) project nearing completion in April 2007, project partners decided to build on the results by applying to the sponsors – the EU INTERREG IIIB North West Programme – to progress some of the project's outputs. In particular, continuation of the transnational partnership, promotion of the results and building on the improved ability to map seabed habitats by taking on a new survey challenge in deep water. Following a formal evaluation by the Programme Steering Committee, the proposal was accepted and the MESH project will now finish in early 2008.**

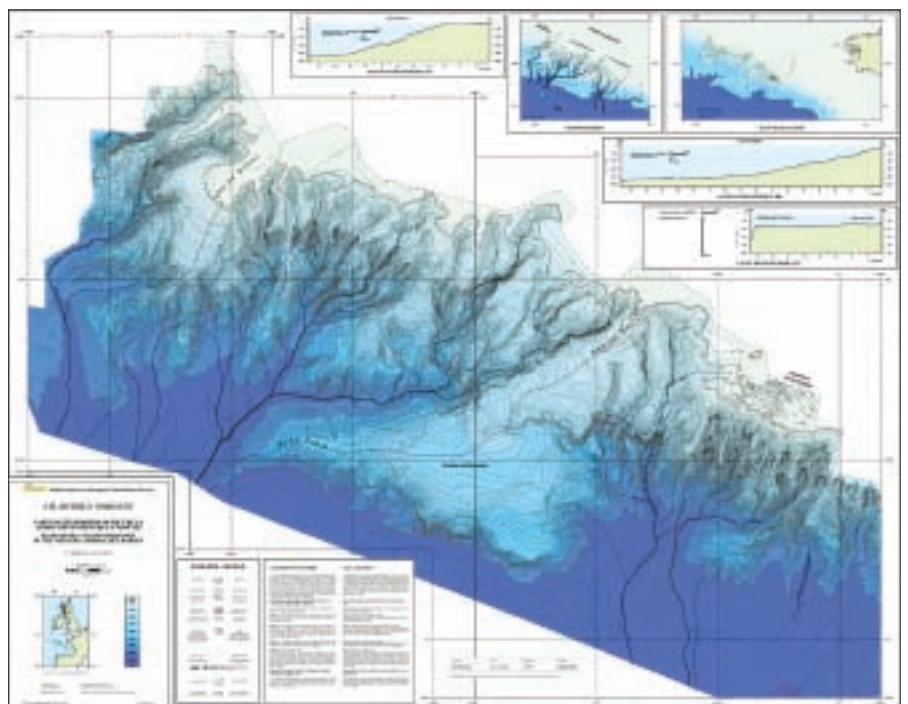
A large part of the MESH extension will comprise a deep-water survey at the edge of the continental shelf in the south west of the MESH project area, where JNCC's offshore Natura 2000 programme has identified an area of potential reef habitat; as part of JNCC's work in 2006, extensive areas of cold water coral reef habitat was observed off north-west Scotland.

The SW area has considerable topographic interest, encompassing the only steep-sided submarine canyons identified in UK waters, some extending to over 4,000m depth. As the survey area crosses French, Irish and UK waters, it will provide an

excellent opportunity to continue the collaborative work undertaken by the MESH project; JNCC will be working closely with the Marine Institute (Ireland), Ifremer (France), the University of Gent (Belgium) and our UK colleagues the British Geological Survey and Cefas.

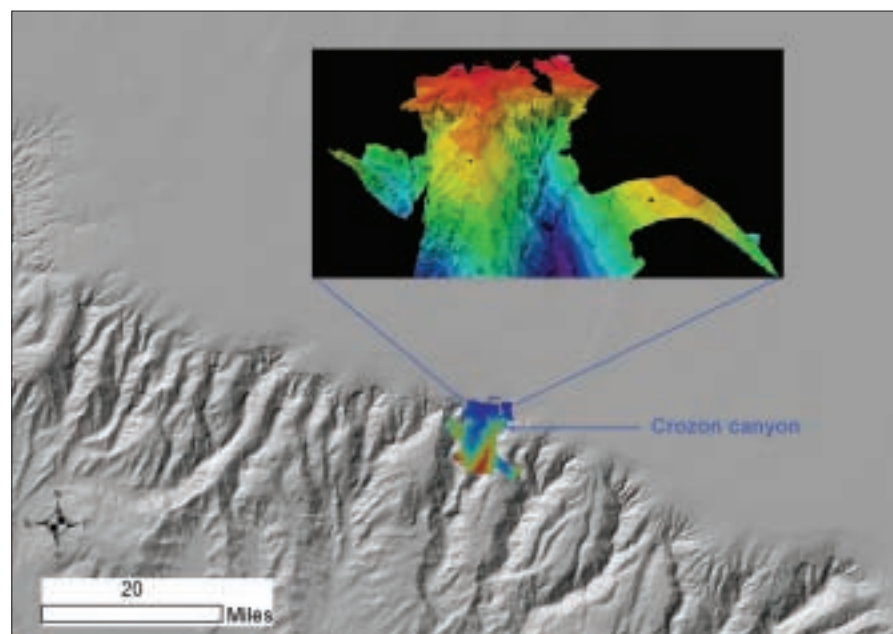
This survey will test the MESH survey standards and protocols to determine their

suitability for the offshore environment. The location of the canyons 200 nautical miles offshore and their steep slopes dropping to depths of several kilometres below sea level will present technical challenges for the survey team. One of the key outputs from the MESH project is a guidance framework for seabed habitat mapping covering all stages of a project from planning through survey, analysis, map



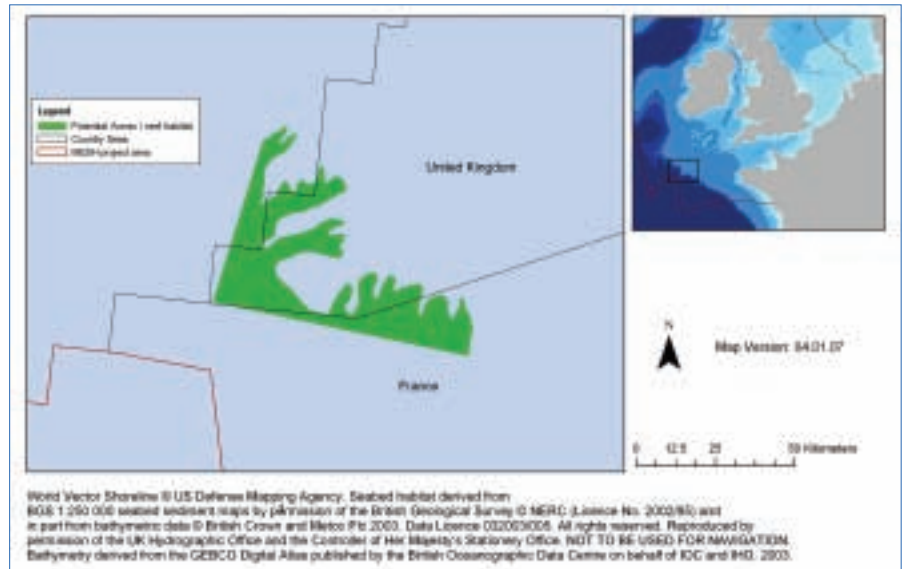
Bathymetry and physiography of the canyons area.

© Ifremer 2006



Background shaded relief is based on multibeam echo sounder data from the French EEZ Programme and was shown in Bourillet J-F, Raoul C. and Le Suavé R., 1999. *Géomorphologie de la marge Atlantique Nord-Est, 7ème Congrès de Sédimentologie, 15-17 Novembre 1999. Publication ASF, Nancy, pp. 39-40.* Inset image created from more recent multibeam echo sounder data from the R/V Pourquoi pas? acquired during a sea test in August 2006. © Ifremer 2006

Location of planned deep-water survey.  
The green area highlights the potential reef habitat identified as part of the JNCC Offshore Natura 2000 programme.



production and finally the practical application of maps for environmental management. Consequently, the MESH partners propose to run this canyons project as a demonstration 'proof of concept' for the MESH guidance, since there is a clear practical end-point for the data in terms of potentially identifying a Special Area of Conservation for the Natura 2000 network. All the knowledge gained about deep-water habitats encountered in our offshore Natura work will also be used by MESH to propose an update to the European Nature Information System (EUNIS) habitat scheme to cover the offshore environment.

In addition to the deep-water survey, JNCC will continue to work with our MESH partners to enhance the MESH

webGIS ([www.searchMESH.net/webGIS](http://www.searchMESH.net/webGIS)) and MESH metadata catalogue ([www.searchMESH.net/metadata](http://www.searchMESH.net/metadata)), develop a responsive habitat and species distribution model as a decision support tool for coastal zone management, and promote the use of the key MESH products to the wider user community. We estimate the work on these four

sub-tasks will take approximately 9-12 months to complete, including time for planning, undertaking the work and presenting the results.

 Jon Davies  
MESH Project Coordinator  
Tel: +44 (0)1733 866835  
Email: [jon.davies@jncc.gov.uk](mailto:jon.davies@jncc.gov.uk)

*This photograph was produced as part of the UK Department of Trade and Industry's offshore energy Strategic Environmental Assessment programme. The survey of areas of potential reef was funded by Defra and managed on Defra's behalf by the JNCC to provide information to support the implementation of the EU Habitats Directive in UK offshore waters. The SEA programme is funded and managed by the DTI and coordinated on their behalf by Geotek Ltd and Hartley Anderson Ltd. Cold water coral reef. © Crown copyright, all rights reserved.*



# Calling nature to account

## *JNCC stages environmental economics workshops*

The JNCC vision and strategy places the organisation's work firmly within the context of sustainable development. As a consequence, JNCC is now increasingly involved with social and economic aspects of nature conservation. Economics can add substantial value to JNCC's work. It can help us to understand and alter the human behaviour that causes unsustainable biodiversity loss. It can also help to advocate and plan conservation projects effectively. The Millennium Ecosystem Assessment demonstrated the important links between ecosystems and human wellbeing. Since its publication in 2005, there has been increased interest in using environmental economics for biodiversity policy in the UK Government and worldwide.

Emily McKenzie began work as the Environmental Economics Adviser at JNCC in January 2006. Her principal task is to enable economics to be incorporated into JNCC's work and policy advice. A first step was running two capacity-building environmental economics workshops for JNCC staff.

The first workshop was for directors, project managers and programme leaders, with a second for policy advice staff. They were devised to develop a sympathetic understanding of environmental economics, build skills in the organisation and prioritise future work in this area. Presentations covered topics such as economic valuation, cost-benefit analysis, national income accounting, market failure and economic



*The environmental economics workshops enabled JNCC staff to prioritise future work in this area.*  
© JNCC

instruments. Case studies were included to demonstrate how economic tools have been used to support nature conservation elsewhere. There were participative sessions to discuss the implications for JNCC's work across a range of areas.

For information on biodiversity economics ([www.biodiversityeconomics.org/index.html](http://www.biodiversityeconomics.org/index.html))

 Emily McKenzie  
Environmental Economics Adviser  
Tel: +44 (0) 1733 866918  
Email: [emily.mckenzie@jncc.gov.uk](mailto:emily.mckenzie@jncc.gov.uk)

# Habitats Directive in Poland

## *Delegation visits JNCC for briefing on Directive*

In December JNCC hosted a delegation from the Polish Ministry of Environment headed by Under-Secretary Andrzej Szweda-Lewandowski. The two day visit to

the UK was arranged under the auspices of the UK-Poland twinning project coordinated by Natural England, which included meetings with staff from Natural

England, Defra as well as JNCC. The Under-Secretary also met with Defra Minister Barry Gardiner.

The meeting hosted at Monkstone House comprised presentations by Director of Resources and External Affairs, Marcus Yeo, on the role and responsibilities of the JNCC; the interpretation and implementation of the EC Habitats Directive given by Wyn Jones, Head of Habitats Advice, and on UK monitoring standards given by James Williams, Reporting and Standards Manager. The delegation were particularly interested in measures taken in the UK to meet obligations under the Directive and a lively discussion was had especially on the issue of protecting and managing Special Areas of Conservation and the reporting of conservation status.

 Wyn Jones  
Head of Habitats Advice  
Tel: +44 (0) 1733 866852  
Email: [wyn.jones@jncc.gov.uk](mailto:wyn.jones@jncc.gov.uk)

*A species which benefits from strict protection in both Poland and the UK is the wildcat Felis silvestris.*  
© Natural England





# JNCC gets everyone on-topic

## *UK hosts management meeting of the European Topic Centre on Biological Diversity*

A major meeting of experts in biological diversity was held in Peterborough last November. Hosted by JNCC, the core of the discussions of the European Topic Centre on Biological Diversity (ETC/BD) were around work to create a European data centre for biodiversity, building strong partnerships amongst those who can help with data and information gathering, and how to support policy-making decisions, especially action identified under the EU Biodiversity Communication.

This was the second time JNCC had hosted an ETC management meeting, the previous one being held at Battleby in 1998. Much of the meeting was held at Barnsdale Hall Hotel, on the scenic shores of Rutland Water, one of the UK's Ramsar sites.

European Topic Centres are institutions/organisations contracted by the European Environment Agency (EEA) to execute tasks identified in the multiannual work programme. There are five topic

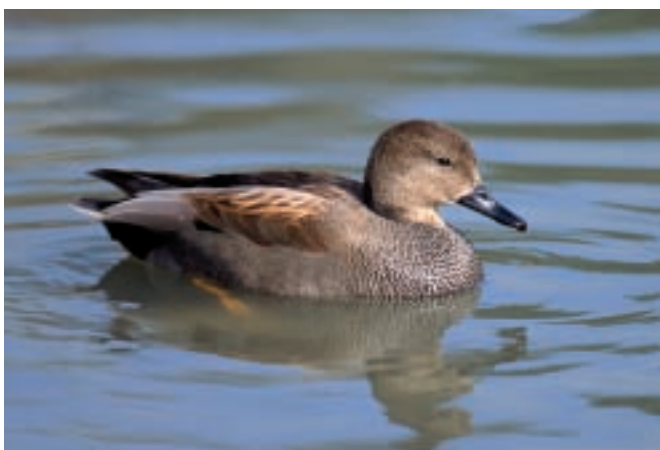
centres, the other four being on Terrestrial Environment; Water; Resource and Waste Management; and Air and Climate Change.

The role of the ETCs is to:

- assist the EEA in its task of reporting on Europe's environment by addressing state and trends of biodiversity in Europe;
- provide the relevant information to support the implementation of environmental and sustainable development policies in Europe;
- build capacity for reporting on biodiversity in Europe, mainly through the European Information and Observation Network (EIONET).

This was the fourth management meeting of ETC/BD which succeeds the former ETC on Nature Protection and Biodiversity (2001-2004) which itself succeeded the ETC on Nature Conservation (1995-2000). Its activities are organised following EEA's strategy and its geographical coverage has increased to reflect the new members of the EEA and the recent enlargement of the European Union.

The ETC consortium consists of nine partners who share the responsibility for the work programme. The partners are from France (Museum National d'Histoire Naturelle); the Czech Republic (Agency for Nature Conservation and Landscape Protection of the Czech Republic); Estonia (Estonian Environmental Information Centre); Finland (European Forest Institute); The Netherlands (European Centre for Nature Conservation, and Wetlands International); Italy (Istituto Centrale per la Ricerca scientifica e tecnologica applicata al Mare); Slovakia (Institute of Landscape Ecology); and JNCC from the UK.



Rutland Water, a Ramsar site, is noted for its waterbirds and supports an internationally important population of Gadwall. © David Kjaer/naturepl.com



James Williams

Reporting and Standards Manager

Tel: +44 (0) 1733 866868

Email: james.williams@jncc.gov.uk

# Conservation Conversation



This issue we focus on independent Committee member Peter Doyle. Along with his work for JNCC, Peter is visiting professor in geosciences, University College London and chairs the Geoconservation Commission of the Geological Society. He previously worked as a research scientist with the Natural History Museum and British Antarctic Survey, and is currently a consultant geologist.

**Q** What do you do when you're not saving the world?

**A** Write books on military history.

**Q** Which species inspired you as a child?

**A** Birds. Small, quintessentially English species such as robins and wrens. Also seabirds found on the north-east coast including auks and gannets.

**Q** What concerns you most about the natural world in the next two decades?

**A** Global warming and the long-term perspective. I'm worried about how we react to it. Knee-jerk reactions may have a detrimental effect.

**Q** What would you do with a £1 million grant for nature conservation?

**A** It's not an immense amount but sufficient to promote an agenda. I'd choose to educate youngsters on the 'whole Earth' approach – the natural world in its complete sense.

**Q** What is your favourite place?

**A** The north-east coast. Whitby and Staithes are where my interest in geology began.

**Q** Desert Island Disc?

**A** God Save the Queen by the Sex Pistols.

**Q** What would you like to achieve in your time at JNCC?

**A** I'm pleased that JNCC is switched on to the Earth as a whole. I want to ensure that the Earth heritage conservation agenda isn't forgotten.

**Q** Who is your human hero in the natural world?

**A** Attenborough. He encompasses it all - a real naturalist of the old school.

**Q** What's your pet hate in nature conservation?

**A** I'm naturally infatuated with geology and it's frustrating when people who should know better can't grasp how important the soil and landscape are to nature as a whole.

**Q** Bellamy, Attenborough or Titchmarsh?

**A** I had Attenborough as my hero, so it would have to be Titchmarsh. He is a good interpreter, without being pretentious.

**Q** Place you'd most like to visit?

**A** I've never been to Africa and I've promised my eight-year-old son we'll visit.

**Q** When I'm reincarnated, I'm coming back as.....?

**A** A carnivorous dinosaur. It would be great to wander down the high street as a *T. rex*!

*The Whitby coast, an inspiration to Peter Doyle, and steeped in geological interest, including jet and an abundance of fossils © Tracy Hebden/Dreamstime.com*

