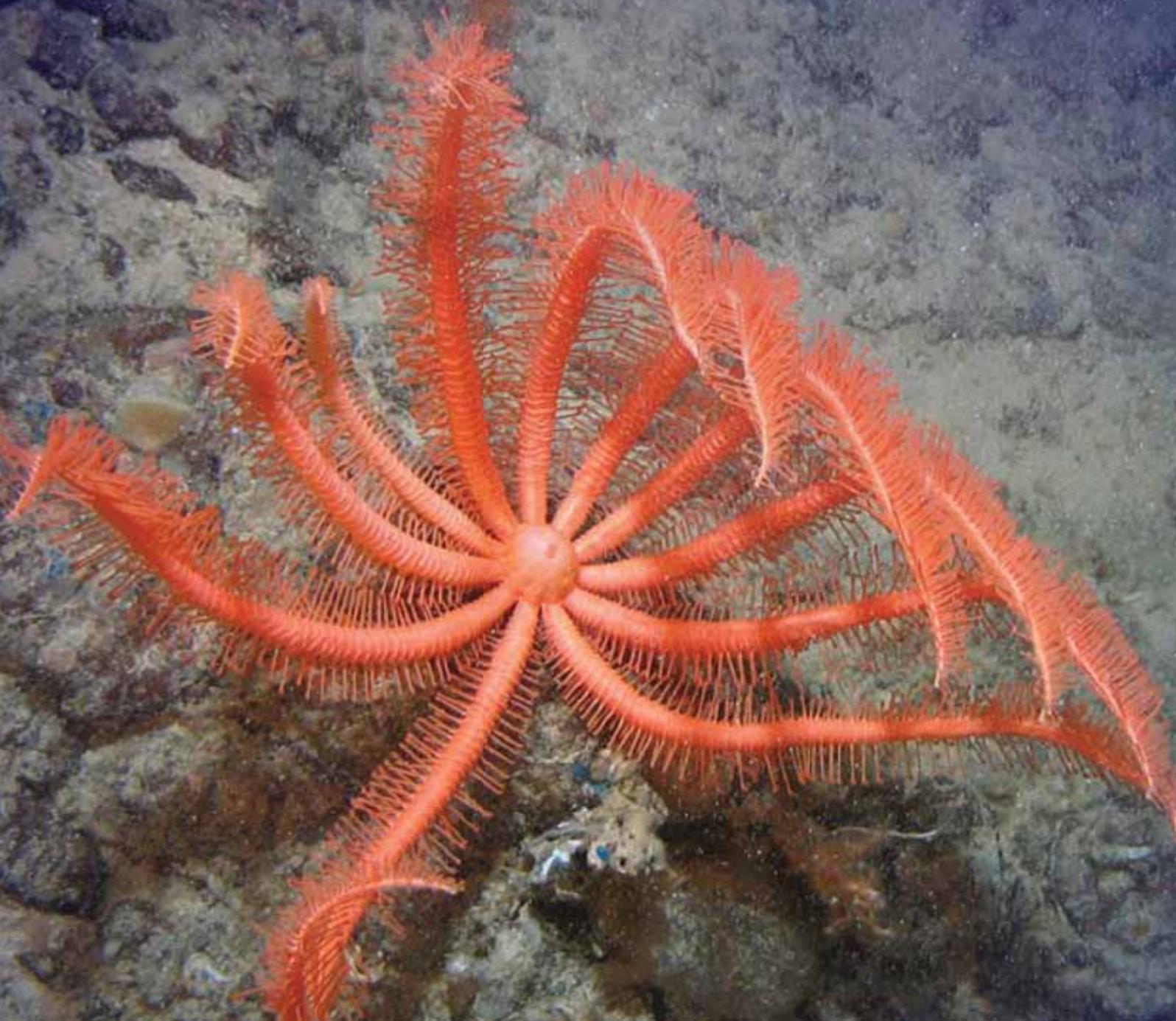


JNCC Annual Report
2008/09



JNCC are involved in the identification of Special Areas of Conservation, Special Protection Areas, OSPAR Marine Protected Areas and new national Marine Protected Areas under forthcoming Marine Acts



- 2% of UK seas are currently inside Marine Protected Areas
- By 2012 we aim to have an ecologically coherent network of Marine Protected Areas in the UK
- There are 4 Regional Marine Conservation Zone projects in England
- There are 81 SACs with Marine Components
- Darwin Mounds was the **first** offshore Marine Protected Area, closed to demersal fishing in 2003

Find out more at www.jncc.gov.uk/marineprotectedsites

Joint Nature Conservation Committee

Annual Report and Accounts 2008/09

Presented to Parliament by the Secretary of State for Environment, Food and Rural Affairs in exercise of the powers conferred by paragraph 18(1) of Schedule 4 of the Natural Environment and Rural Communities Act 2006.

Ordered by the House of Commons to be printed 15 July 2009.



Brisingid seastar *Novodinia antillensis*

Front cover image

Deep water brisingid seastar photographed on Hatton Bank, 600km north-west of Britain. This photograph was taken on a survey jointly funded by Defra and the Department of Trade and Industry (now The Department for Business, Enterprise & Regulatory Reform) Strategic Environmental Assessment programme to contribute to the identification of areas of potential reef. This survey supports the implementation of the EU Habitats Directive in UK offshore waters. The brisingid seastars live on cold-water coral reefs that are long-living, fragile and easily damaged by physical activity. Cold-water coral reefs are protected under the EU Habitats Directive.

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As ever, JNCC looks to be innovative with the design and execution of its **Annual Report**. This year, the front cover was created using an experimental technique we believe has not been used elsewhere, in order to bring out the colour of the marine organism that is our 'cover star'. Printed on a six colour 'Hexachrome' press, the usual orange ink used on this machine was replaced with a fluorescent orange, to further bring out the qualities of the brisingid seastar – making it seem like it is glowing. Having set the goal of attracting people's attention with our **Annual Report** covers, we think you'll agree that we have done so once again.



Soft corals *Alcyonium digitatum* and yellow boring sponge *Cliona celata* on a Methane Derived Authigenic Carbonate structure, Irish Sea

JNCC has a responsibility to identify marine protected areas in the offshore environment around the UK, and is investigating a number of areas of search as part of this work. One of these areas of search, an area of 'submarine structures made by leaking gases', was surveyed in the mid-Irish Sea. 'Submarine structures made by leaking gases' are an Annex I habitat under the EU Habitats Directive. Such structures may be formed from Methane Derived Authigenic Carbonate, or MDAC. MDAC is created when seabed sediments become bound together by

carbonate cement – a by-product of the microbial oxidation of methane rising up through the seabed, forming reef-like structures that provide a unique habitat for a wide range of marine life such as dead man's fingers *Alcyonium digitatum* and the hydroid *Tubularia sp.* The known occurrences of these MDAC structures are limited within UK waters; the findings from this work make a valuable contribution to JNCC's knowledge of this habitat's distribution in UK waters.

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Introduction to JNCC



The Joint Nature Conservation Committee (JNCC) is the statutory adviser to Government on UK and international nature conservation, on behalf of the Council for Nature Conservation and the Countryside, the Countryside Council for Wales, Natural England and Scottish Natural Heritage

Vision for JNCC

JNCC will be recognised as a reputable provider of high-quality scientific evidence and advice relating to UK-wide and international terrestrial and marine nature conservation, working with the country conservation bodies.

Mission for JNCC

JNCC provides evidence and advice to assist the UK Government and devolved administrations in developing and implementing coherent domestic and international policies on the protection of natural resources as an integral part of sustainable development. The evidence and advice covers biodiversity and geodiversity issues which arise in one or more country within the UK and affect the interests of the UK as a whole, in the Overseas Territories and Crown Dependencies, and, where appropriate, internationally. JNCC disseminates knowledge to foster understanding of these issues.

Through the support company, JNCC staff provide support to enable JNCC to advance its vision and mission.

Our strengths are:

- we operate at a UK level within a devolved UK;
- we have a strong culture of working with others and promoting collaboration;
- we work across multiple geographic scales, which strengthens our evidence base and our capability to deliver;
- we have, and draw together, a wealth of skills and knowledge on nature conservation in the terrestrial, freshwater and marine environments.

We will:

- contribute to the development of the UK, EU and global evidence base and identify future challenges to UK biodiversity and geodiversity

by gathering intelligence and assessing risk and opportunity;

- provide advice and long-term thinking on solutions to biodiversity and geodiversity challenges, and engage in, commission and deliver initiatives to address these challenges:
 - a. outside territorial waters;
 - b. in the Overseas Territories and Crown Dependencies; and
 - c. globally.



Llywodraeth Cynulliad Cymru
Welsh Assembly Government



Northern Ireland
Assembly



Cyngor Cefn Gwlad Cymru
Countryside Council for Wales



Scottish Natural Heritage
All of nature for all of Scotland

Council for
Nature Conservation
and the Countryside

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The JNCC Annual Report 2008/09 has been presented to the following Ministers:

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A Question of Priorities Chair's Introduction

During the past year the Committee has worked together splendidly, in particular tackling a revision of JNCC's vision and mission, which are on page 4. I should like to acknowledge the work of all Committee members in reaching consensus on this, and especially a small task force which helped refine the product. Of course, such a result is only possible due to the work accomplished by many staff of the support company, and it has been a year in which staff have truly shown their professional nature.

This new vision and mission prepares JNCC for the challenges ahead, and has set a long-term direction. It reflects what UK Government and devolved administrations see as JNCC's main work areas, and we look forward to working with them to achieve the UK's national, European and international nature conservation objectives. Stakeholders have already offered strong support for our revised strategy, and have welcomed the clarity it brings to our future direction. It was approved by the Joint Committee in March 2009 and its priorities are already having an influence on the scope of JNCC's activities.

The new strategy sets out the following as a vision for the organisation: "JNCC will be recognised as a reputable provider of high-quality scientific evidence and advice relating to UK-wide and international terrestrial and marine nature conservation, working with the country conservation bodies."

While the word 'sustainable' does not appear in the vision as written, I have on several occasions drawn attention to the fact that properly managed and co-ordinated nature conservation is one of the keys to the UK achieving its sustainability objectives. Sustainable development is often seen as economic or social in orientation, but without nature conservation at its heart, no development can be sustainable! Our work on the UK footprint on global biodiversity is an excellent example here, where a small effort from the support company has produced excellent results. This study is ongoing, as part of our broader conservation outreach efforts.

A priority continues to be nature conservation in the marine environment. The sharp increase in activity has been reflected in an expansion of staff taking up the challenge that this developing area demands. Indeed, the appointment for the first time of a dedicated Marine Director demonstrates that we are ensuring we are 'fit for purpose' to help governments deliver their marine responsibilities.

It has been a key year in the cycle of international agreements, and we have also ensured more resources are made available for work in the Overseas Territories. We took part in a meeting organised by IUCN, the EU and French Government in 2008 which examined the needs, pressures and opportunities for EU Overseas Territories. France and the UK have the largest suite of such Territories, followed by Denmark and the Netherlands. Continuing co-operation between EU countries with such Territories will be essential to ensure this part of the EU's share of global biodiversity is managed and conserved most effectively. Our interests in this area also include the nearer Crown Dependencies, with which we have strengthening links.

JNCC is of course still involved at the heart of nature conservation in the UK, co-ordinating activities and ensuring there are appropriate common standards. We are also looking at some horizon scanning activities, in partnership with our country agency colleagues as appropriate. We continue to be responsible for the quinquennial review of the schedules of the Wildlife and Countryside Act, and it is with pleasure we noted Government's initial response to our recommendations in this area. Other key national initiatives included our work on formulating a surveillance strategy for terrestrial biodiversity, continuing our efforts in the area of environmental economics, and work on a UK Geodiversity Action Plan.

I hope you enjoy reading this *Annual Report*. One thing we can be certain of in the next twelve months is that continuing change in our economic and physical environments means our work will also continue to evolve – here the valuable efforts of the Inter-Agency Climate Change Forum, ably led by Professor Usher, is but one example. Finally, I should like to thank all members of the Committee for their work over the past year, and look forward to a year in which we make better efforts to stem the rate of loss of biodiversity, and enhance awareness and appreciation of both biodiversity and geodiversity. Next year, 2010, will be indeed the moment of truth when nationally and globally we see how well, or not, we have done in stemming that loss.



Peter Bridgewater
Chair, JNCC

Mater o Flaenoriaethau Cyflwyniad y Cadeirydd

Yn ystod y flwyddyn, mae'r Pwyllgor wedi cydweithio'n rhagorol, yn arbennig â'r gwaith o ddiwygio 'Gweledigaeth a Chenhadaeth' JNCC, sydd i'w gweld ar dudalen 4. Hoffwn gydnabod gwaith holl aelodau'r Pwyllgor wrth ddod i gytundeb cyffredinol, ac yn enwedig i'r grwp a ddatblygwyd y dogfen. Wrth gwrs, nid yw canlyniad ond yn bosibl oherwydd y gwaith a gyflawnwyd gan lawer o staff y Cwmni Cynorthwyo, a bu'n flwyddyn pan ddangosodd staff eu natur broffesiynol o ddifrif.

Mae'r 'Weledigaeth a Chenhadaeth' hon yn paratoi JNCC ar gyfer yr heriau sydd o'n blaenau, ac mae wedi gosod cyfeiriad hirdymor. Mae'n adlewyrchu beth mae Llywodraeth y DU a'r gweinyddiaethau datganoledig yn eu hystyried yn brif feysydd gwaith JNCC, ac rydym yn edrych ymlaen at weithio gyda hwy i gyflawni amcanion gwarchod natur cenedlaethol, Ewropeaidd a rhyngwladol y DU. Mae'r budd-ddeiliaid eisoes wedi cynnig cefnogaeth gref i'n strategaeth ddiwygiedig, ac wedi croesawu'r eglurder y mae'n ei roi i'n cyfeiriad ar gyfer y dyfodol. Cafodd ei chymeradwyo gan y Cyd-Bwyllgor ym Mawrth 2009, ac mae ei blaenoriaethau eisoes yn dylanwadu ar gweithgareddau JNCC.

Mae'r strategaeth yn datgan Gweledigaeth y sefydliad yn canlynol: "Bydd JNCC yn cael ei gydnabod fel darparwr dibynadwy o dystiolaeth a chynghor o safon uchel ynglŷn â chadwraeth dirol a morol ledled y DU ac yn rhyngwladol, gan weithio gyda'r asiantaethau gwarchod natur wledig."

Er nad yw'r gair 'cynaliadwy' i'w weld yn y Weledigaeth, yr wyf ar sawl achlysur wedi tynnu sylw at y ffaith fod gwarchod natur, sy'n cael ei rheoli a'i chydlynu'n gywir, yn un o'r allweddau i gyflawnu hamcanion cynaliadwyedd y DU. Yn aml, ystyrir mai economaidd neu gymdeithasol yw gogwydd datblygu cynaliadwy, ond heb gwarchod natur yn graidd iddo, ni all unrhyw ddatblygu fod yn gynaliadwy! Mae ein gwaith ar ôl-troed y DU o ran bioamrywiaeth fyd-eang yn enghraifft ardderchog yn y cyswllt hwn, lle mae ymdrech fechan gan y Cwmni Cynorthwyo wedi deillio ar ganlyniadau ardderchog. Mae'r astudiaeth hon yn parhaufel rhan o'n cyhoeddusrwydd ehangach ar gwarchod natur.

Un flaenoriaeth barhaus yw gwarchod natur yn yr amgylchedd morol. Mae'r cynnydd sydyn mewn gweithgarwch wedi ei adlewyrchu mewn ehangiad yn y staff sy'n derbyn yr her y mae'r maes datblygol hwn yn ei gosod. Yn wir, mae penodi Cyfarwyddwr Morol pwrpasol am y tro cyntaf yn dangos ein bod yn sicrhau ein bod yn 'addas i'n pwrpas' o ran helpu llywodraethau i gyflawni eu cyfrifoldebau morol.

Bu'n flwyddyn allweddol yn y cylch cytundebau rhyngwladol, ac rydym hefyd wedi sicrhau bod mwy o adnoddau ar gael ar gyfer gwaith yn y Tiriogaethau Tramor. Buom yn cymryd rhan mewn cyfarfod a drefnwyd gan IUCN, yr UE a Llywodraeth Ffrainc yn 2008, a edrychodd ar yr anghenion, y pwysau a'r cyfleoedd ar gyfer Tiriogaethau Tramor yr UE. Mae gan Ffrainc a'r DU y nifer fwyaf o Dirioogaethau, gyda Denmarc a'r Iseldiroedd yn dilyn. Mae cydweithrediad parhaus rhwng y gwledydd UE gyda'r Dirioogaethau yn hanfodol i sicrhau bod gyfran yr UE o fioamrywiaeth fyd-eang yn cael ei rheoli a'i diogelu yn y modd mwyaf effeithiol. Mae ein diddordebau yn y maes hwn yn cynnwys Dibynwledydd agosaf y Goron ac mae ein cysylltiadau â'r rhain yn cryfhau.

Mae JNCC, wrth gwrs, yn dal i fod yn weithgar yng nghanol gwaith gwarchod natur yn y DU, gan gydlyn gweithgareddau a sicrhau bod safonau cyffredinol priodol yn bodoli. Rydym hefyd yn edrych ar rai gweithgareddau rhagweld, mewn partneriaeth â'n cydweithwyr yn yr asiantaethau gwledig fel y bo'n briodol. Rydym yn parhau i fod yn gyfrifol am yr adolygiad pum-mlyneddol o amserlenni'r Ddeddf Bywyd Gwylt a Chefn Gwlad, a bu'n bleser gennym nodi ymateb dechreuol y Llywodraeth i'n hargymhellion yn y maes hwn. Yr oedd y mentrau cenedlaethol allweddol eraill yn cynnwys ein gwaith ar lunio strategaeth gwyltadwriaeth ar gyfer bioamrywiaeth dirol, parhau â'n hymdrechion ym maes economeg amgylcheddol, a gwaith ar Gynllun Gweithredu Geoamrywiaeth ar gyfer y DU.

Gobeithio y byddwch yn mwynhau darllen yr **Adroddiad Blynyddol** hwn. Un peth y gallwn fod yn sicr ohono dros y deuddeg mis nesaf yw bod newid parhaus yn ein hamgylcheddau economaidd a ffisegol yn golygu y bydd ein gwaith hefyd yn parhau i esblygu – mae ymdrechion gwerthfawr y Fforwm Rhyngasiantaethol ar Newid yn yr Hinsawdd, sy'n cael ei arwain yn fedrus gan yr Athro Usher, yn un enghraifft o hyn. Yn olaf, hoffwn ddiolch i holl aelodau'r Pwyllgor am eu gwaith dros y flwyddyn ddiwethaf, ac rwy'n edrych ymlaen at flwyddyn lle byddwn yn gwneud gwell ymdrechion i atal cyflymder colli bioamrywiaeth, ac i gyfoethogi ymwybyddiaeth a gwerthfawrogiad o fioamrywiaeth a geoamrywiaeth. Y flwyddyn nesaf, 2010, fydd yr awr dyngedfennol pan fyddwn yn gweld, ar raddfa genedlaethol ac yn fyd-eang, pa mor dda, neu fel arall, yr ydym wedi atal y golled.



Peter Bridgewater
Cadeirydd, JNCC

Ceist a thaobh Phrìomhachasan Ro-ràdh a' Chathraiche

Thar na bliadhna a dh'fhalbh dh'obraich a' Chomataidh còmhla gu fìor mhath, gu h-àraidh ann a bhith ag ath-dheasachadh lèirsinn agus rùn an JNCC, a gheibhear air duilleag 4. Bu mhath leam obair gach ball dhen Chomataidh a mholadh ann a bhith a' tighinn gu co-aontachd mun seo, agus gu sònraichte am buidheann-gnìomha beag a thug loinn air an obair. Cha bhiodh a leithid air tachairt às aonais na h-obrach a rinn iomadh neach-obrach sa chompanaidh taice. 'S e bliadhna a bh' ann san do nochd an luchd-obrach cho proifeiseanta 's a tha iad nan dreuchd.

Tha an lèirsinn agus an rùn ùr seo ag ullachadh an JNCC airson nan dùbhlann a tha air thoiseach, agus tha e air an t-slighe sa cheann fhada a stèidheachadh. Tha e a' nochdadh na tha Riaghaltas na RA agus na rianachdan tiomnaichte a' faicinn mar phrìomh raointean obrach an JNCC, agus tha sinn a' coimhead air adhart ri a bhith ag obrachadh còmhla riutha gus amasan glèidhteachais nàdair nàiseanta, Eòrpach agus eadar-nàiseanta na RA a choileanadh. Thug luchd-compàirt taic mhòr mar-thà dhan ro-innleachd ùir againn, agus chuir iad fàilte air cho soilleir 's a tha i a' dèanamh na slighe a tha romhainn. Chaidh aontachadh leis a' Cho-chomataidh sa Mhàrt 2009 agus tha na prìomhachasan a' toirt buaidh mar-thà air farsaingeachd raon-obrach an JNCC.

Chuir an ro-innleachd ùr na leanas fa chomhair na buidhne mar lèirsinn: "Aithnichear an JNCC mar sholaraidhe le deagh chliù a bheir seachad sàr fhianais agus comhairle air glèidhteachas nàdair aig muir 's air tìr air feadh na RA agus gu h-eadar-nàiseanta, ag obrachadh còmhla ri buidhnean glèidhteachais na dùthcha."

Ged nach eil am facal 'seasmhach' sgrìobhte san lèirsinn, tha mi air aire dhaoine a tharraing corra uair gu bheil glèidhteachas nàdair air a dheagh riaghladh is air a cho-òrdanachadh na phrìomh nì gus an RA na h-amasan seasmhachd a tha roimhpe a choileanadh. Thathar tric a' faicinn leasachadh seasmhach mar chuspair sòisealta no eaconamach, ach nas lugha na tha glèidhteachas nàdair na theis-mheadhan, cha bhi leasachadh sam bith seasmhach! Tha an obair againn air lorg na RA air bith-iomadachd cruinneil na deagh eisimpleir an seo, far an tàinig fìor thoradh bhon bheagan oidhirp a rinn an companaidh taice. Tha an sgrùdadh seo a' leantainn mar phàirt de dh'oidhirpean glèidhteachais nas fharsainghe.

Leanaidh glèidhteachas nàdair aig muir air adhart mar phrìomhachas. Air sgàth barrachd obrach an seo, tha barrachd luchd-obrach a' dol an sàs san raon dhùbhlach seo. Gu dearbh, tha dreuchd ùr Stiùiriche Mara a' sealltainn gu bheil sinn a' dèanamh cinnteach gu bheil sinn comasach air an obair gus riaghaltasan a chuideachadh ann a bhith a' libhrigeadh an cuid dhleastanasan mara.

Bha a' bhliadhna cudromach ann an cuairt nan aontan eadar-nàiseanta. Rinn sinn cinnteach gum biodh barrachd stòrasan ann dhan obair sna Tìrean Thall Thairis. Ghabh sinn pàirt ann an coinneamh a chuireadh air dòigh leis an IUCN, an AE agus Riaghaltas na Frainge ann an 2008. Thug seo sùil air feumalachdan, uallaichean agus air cothroman do Thìrean Thall Thairis an Aonaidh Eòrpaich. 'S ann aig an Fhraing is aig an RA as motha a tha dhe na Tìrean sin, agus an uair sin aig an Danmhairg is aig an Òlaind. Bidh co-obrachadh leantainneach còmhla ri Tìrean mar sin riatanach gus a bhith cinnteach gun stiùirear agus gun gleidhear cuid an Aonaidh Eòrpaich dhen bhith-iomadachd chruinneil cho math 's a ghabhas. Tha ùidh againn cuideachd sna Dùthchannan an Eisimeil a' Chrùin, agus tha sinn a' daingneachadh cheanglaichean riutha.

Tha an JNCC fhathast aig teas-meadhan glèidhteachas nàdair san RA, a' co-òrdanachadh obraichean agus a' dèanamh cinnteach gu bheil inbhe iomchaidh air am feadh. Tha sinn cuideachd a' coimhead air obair a thaobh sgrùdadh, ann an compàirt ri luchd-obrach bhuidhnean dùthcha mar a bhios iomchaidh, air cunnartan a dh'fhaodadh nochdadh. Tha uallach oirnn fhathast airson sgrùdadh gach còig bliadhna air clàran-obrach Achd an Fhiadh-bheatha is na Dùthcha. Thug a' chiad fhreagairt on Riaghaltas toileachas dhuinn a thaobh ar molaidhean san raon seo. Am measg iomairtean nàiseanta eile a th' againn, tha obair air ro-innleachd sgrùdaidh air bith-iomadachd air tìr, a' cumail oirnn a thaobh eaconamas àrainneachd agus ar n-obair air Plana-gnìomha Geo-iomadachd dhan RA.

Tha mi an dòchas gun còrd an **Aithisg Bhliadhnail** seo ribh. Faodaidh sinn a bhith cinnteach sa bhliadhna a tha romhainn gum bi ar n-obair an còmhnaidh ag atharrachadh air sgàth chùisean fiosaigeach is eaconamach – chan eil ann an obair luachmhor Fòram Eadar-bhuidhnean Atharrachadh Gnàth-shìde, fo stiùireadh an Àrd-oll Usher, ach aon eisimpleir dhen seo. Mu dheireadh, bu mhath leam taing a thoirt dhan Chomataidh airson na rinn iad sa bhliadhna a chaidh seachad, agus tha sinn a' coimhead air adhart ri bliadhna le barrachd oidhirp ga dhèanamh gus casg a chur air an ìre aig a bheilear a' call bith-iomadachd, agus gus daoine a dhèanamh nas mothachaile agus nas measaile air bith-iomadachd agus geo-iomadachd. An ath-bhliadhna, 2010, gheibh sinn a-mach gu nàiseanta agus gu cruinneil, gu dè cho math 's a bha, no nach robh, sinn ann a bhith a' cur casg air a' chall sin.



Peter Bridgewater
Cathraiche, JNCC



Narrow-bordered five spot burnet moth *Zygaena lonicerae jocelynae*
Isle of Skye, Scotland

This is regarded as of Red Data Book status in Scotland – it is not known outside of the Isle of Skye. Also known as the Talisker burnet, it was part of the Quinquennial Review of Schedules 5 & 8 of the Wildlife and Countryside Act 1981 (see Chapter 6). The other British subspecies *Zygaena lonicerae latomarginata* is widely distributed and locally common in England and the east of South Wales, hence it is not threatened and is not proposed

for legal protection. Recent evidence has been obtained of commercial collecting of larvae, for sale as livestock, at such a large scale as to be a significant threat to this subspecies. Previously, there had been no indication of damaging collecting or trade in British Burnet moths. The survival prospects of this subspecies will be improved by full legal protection.

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Global nature conservation advice



JNCC provides authoritative, science-based advice on issues concerning global nature conservation and plays a key role in international agreements and conventions

A range of multilateral conventions and agreements govern global nature conservation or have an influence upon it. The UK is party to a number of these Multilateral Environmental Agreements (MEAs) – see the ‘at a glance’ guide on page 16 – and JNCC provides technical advice to Government on their development and implementation. We also advise UK Government, devolved administrations and the country conservation bodies on the implications of international agreements for nature conservation at home and within the Crown Dependencies and Overseas Territories.

Major meetings involving contracting parties to MEAs take place, typically, at three-yearly intervals. 2008 was a landmark year, with several Conferences of the Parties to MEAs taking place during the year.

The ninth Conference of the Parties to the **Convention on Biological Diversity (CBD)** was held in Bonn, Germany, in May 2008. JNCC provided a team of four staff led by Paul Rose, JNCC’s Head of Biodiversity Information, to provide technical support to the UK delegation. Other JNCC staff were involved in side events and meetings.

The CBD is one of the three global conventions born out of the Rio de Janeiro Earth Summit in 1992 and provides an international framework for conservation of biodiversity and its sustainable use. In 2002, contracting parties adopted a target of significantly reducing the current rate of biodiversity loss by 2010.

The Conference in Bonn was attended by 191 contracting parties and it agreed new measures to increase the world's network of protected areas and to negotiate international rules on fair access to genetic resources. Other outcomes from Bonn included the creation of a climate change expert group, a call for a sound policy framework on biofuel production, and enhanced activity in the areas of marine conservation, invasive non-native species and global environmental assessments.

A CBD capacity-building workshop for south and east Asian nations was held in Tsukuba, Japan, in December 2008 to help participating countries prepare national reports on progress towards CBD targets. The UK was invited to take part to share its experience of the use of indicators in the assessment of progress towards CBD goals, and JNCC's Jessamy Battersby attended the workshop. JNCC has contributed to work led by Defra to produce indicators – such as bird population trends and distribution of non-native species – to measure the UK's own progress, which were published as *Biodiversity Indicators in Your Pocket 2007*, and as an online update in 2008 (www.jncc.gov.uk/biyp).

The 10th Conference of the Parties to the **Ramsar Convention on Wetlands** was held in Changwon, South Korea, in October 2008. David Stroud and Jessica Magnus from JNCC provided scientific support to the Defra-led UK delegation. Among the Conference's outcomes was a resolution that compiles technical and policy guidance on Highly Pathogenic Avian Influenza (HPAI) H5N1, which was also a subject of resolutions at meetings of the Convention on Migratory Species and its African-Eurasian Waterbird Agreement. The emergence and spread of new animal diseases, such as HPAI H5N1, is increasingly recognised as an issue that has implications both for nature conservation and human well-being, and which needs to be addressed at an international scale.

JNCC's David Stroud has been closely involved in development of a 'roadmap' for the technical and policy guidance related to HPAI H5N1 produced during recent years.

The Ramsar Conference also endorsed new guidance for land managers aimed at reducing the risk of HPAI infection at wetland nature reserves. Another resolution noted alarm at "continuing decline in the abundance of many waterbirds throughout the world" resulting from unsustainable exploitation and the loss and degradation of wetland habitats.



Ramsar winner

In 2008, Joint Committee member Dave Pritchard was presented with the Ramsar Wetland Conservation Award and Evian Special Prize for science at the Conference of the Parties to the Ramsar Convention. The award was a recognition of Dave's work in supporting the development and implementation of the Convention over the last two decades.

© IUCN



Migratory waterbirds and climate change

Golden plover *Pluvialis apricaria*

The impact of climate change on waterbirds was one of the subjects discussed at the Meeting of the Parties to the African-Eurasian Waterbird Agreement (AEWA) in Madagascar in September 2008, and is covered in the AEWA publication *Migratory Waterbirds and Climate Change*, which was authored by ornithologists from the British Trust for Ornithology and Wetlands International, which is based in the Netherlands.

The study highlights a range of impacts, including sea-level rise, changes in the timing of biological events and changes in rainfall. For example, golden plover *Pluvialis apricaria* chicks thrive on the larvae of craneflies, but evidence suggests that availability of cranefly larvae is now out of step with golden plover egg-laying as a result of the changing climate.

Chicks © Paul Hobson/naturepl.com

Adult © Juan Carlos Munoz/naturepl.com

JNCC also attended the fourth Meeting of the Parties to the **African-Eurasian Waterbird Agreement (AEWA)** in Madagascar in September 2008. The meeting acknowledged that the status of migratory waterbird populations in the area covered by the Agreement – Africa, the Middle East and western Eurasia – is poor. It recorded alarm at the “continuing decline in abundance of many waterbirds throughout the world”. Despite international targets to reduce the rate of loss of biodiversity by 2010 (see Convention on Biological Diversity above), monitoring evidence suggests that for waterbirds the rate of loss has accelerated. The main causes of loss were identified as:

- habitat loss and degradation;
- unsustainable harvesting of birds;
- use of toxic lead shot; and
- climate change impacts.

The AEWA meeting called for immediate action to address issues raised, and a range of responses were identified as priorities. They include improved international co-operation on conservation of shared migratory waterbirds and fully-funded action plans for the most threatened species.

In December 2008, the ninth Conference of the Parties to the **Convention on Migratory Species (CMS)** was held in Rome. James Williams of JNCC and Colin Galbraith of Scottish Natural Heritage provided scientific support to the UK delegation. Key resolutions included action to reduce the impact of climate change on migratory species, the creation of an international taskforce on wildlife diseases, and recognition of emerging evidence of the impact of noise on marine species.

A second inter-governmental meeting on international co-operation on the conservation of migratory sharks under CMS took place in Rome in December 2008, and the UK, whose delegation included JNCC’s Tom Blasdale, was one of 51 states represented. Building on the outcomes of a previous event in 2007, the meeting considered

possible texts for a CMS instrument on sharks. There was a consensus that the new instrument should be a Memorandum of Understanding and that its objective should be to achieve and maintain ‘favourable conservation status’ for migratory sharks and for their habitats.

The Memorandum is expected to apply to three species that had previously been listed on CMS appendices – the basking shark, the great white shark and the whale shark. However, no agreement was reached about four further species. Work is now being undertaken to put in place the Memorandum’s fundamental principles and a conservation and management plan. The instrument is expected to be open for signature before the end of 2009.

Another development under CMS saw 27 countries agree the final text of an international agreement to conserve endangered migratory birds of prey in Europe, Africa and Asia at an inter-governmental meeting held in Abu Dhabi in October 2008. Eagles, falcons and osprey are among the species that will benefit from the new treaty, which will set out a legal framework for protection and create a funding mechanism for conservation work.

For the The Convention on International Trade in Endangered Species (CITES), JNCC continued to advise Defra on licence applications (around 20,000 per annum) for CITES-listed species regulated under European legislation. We also contributed to the development of Government policy by continuing to provide sound scientific advice in this area of work.

Wildlife conventions and agreements – at a glance guide

The UK is a party to a number of wildlife conventions and agreements at global, regional and European levels. Conventions are international agreements between countries that deal with subjects of common concern. They include:

The Convention on Biological Diversity

Also known as CBD or the Biodiversity Convention

Date: 1992 (Ratified by the UK in 1994)

Purpose: To support the conservation of biological diversity, the sustainable use of resources and the equitable division of the benefits from use of genetic resources.

www.cbd.int

The Convention Concerning the Protection of the World Cultural and Natural Heritage

Also known as World Heritage Convention

Date: 1972 (Ratified by the UK in 1984)

Purpose: To encourage identification, protection and preservation of cultural and natural heritage considered to be of outstanding value.

www.whc.unesco.org

The Convention on the Conservation of Wetlands of International Importance

Also known as the Ramsar Convention

Date: 1971 (Ratified by the UK in 1976)

Purpose: To provide a framework for international co-operation for the conservation of wetlands.

www.ramsar.org

The Convention on International Trade in Endangered Species

Also known as CITES

Date: 1975 (Ratified by the UK in 1976)

Purpose: To ensure that no species of plants and animals are subjected to unsustainable exploitation through trade. CITES now accords protection to more than 30,000 species.

www.cites.org

The Convention on Migratory Species of Wild Animals

Also known as the Bonn Convention

Date: 1979 (Ratified by the UK in 1985)

Purpose: To protect wild animals and birds that migrate across national borders. It provides a framework for the agreement of other instruments to protect species or groups of species. The UK is a party to the following CMS instruments:

- Agreement on the Conservation of Populations of European Bats (EUROBATS);
- Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS);
- Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA);
- Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS);
- Agreement on the Conservation of Albatrosses and Petrels (ACAP);
- Memorandum of Understanding Concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa;
- Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia;
- Memorandum of Understanding Concerning Conservation Measures for the Aquatic Warbler *Acrocephalus paludicola*;
- Memorandum of Understanding on the Conservation of Migratory Birds of Prey in Africa and Eurasia.

www.cms.int

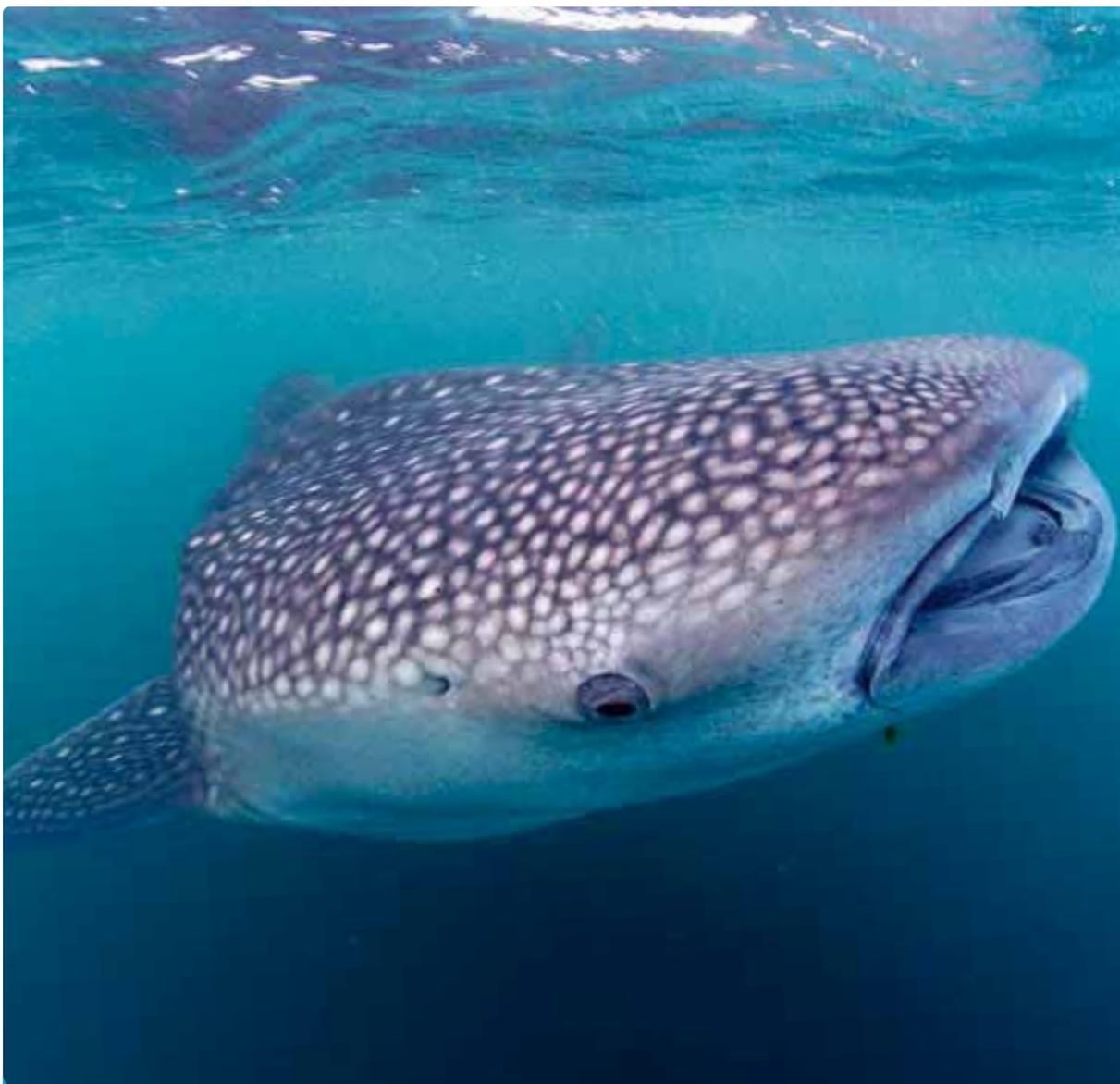
The Oslo and Paris Convention for the Protection of the Marine Environment of the North-East Atlantic

Also known as the OSPAR Convention

Date: 1992 (Ratified by the UK in 1988)

Purpose: To conserve marine ecosystems and safeguard human health by preventing and eliminating pollution, protecting against adverse effects of human activities and encouraging sustainable use of the seas.

www.ospar.org



Whale shark

Rhincodon typus

One of the migratory shark species at the centre of discussions at the Conference of the Parties to the Convention on Migratory Species in Rome in 2008 was the whale shark, the world's largest fish, which can grow to more than 12 metres in length.

Whale sharks feed on plankton and they swim huge distances across tropical and warm temperate seas, possibly following the food supply. The sharks are to be found around coasts as far afield as those of Australia,

India, South Africa and Mexico; in some locations they are present all year round, while in others they visit only at specific times.

Large and slow-moving, the whale shark is vulnerable to harpoon fishing and its population is thought to be in decline. It is rated as 'vulnerable' by the International Union for the Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species.

Images (above and on page 12) © Simon Rogerson

2

Nature conservation in the Overseas Territories and Crown Dependencies



Providing science-based advice on nature conservation issues in the UK's Overseas Territories and Crown Dependencies is an important and developing area of JNCC's work

JNCC's new strategy (see Introduction) reaffirms the importance to the organisation of nature conservation in the UK's Overseas Territories and Crown Dependencies. While most of the 14 Overseas Territories and three Crown Dependencies are relatively small in area, they support unique ecosystems and a large number of rare and threatened species, many of which are found nowhere else in the world. The main threats to biodiversity in the Territories and Dependencies are non-native species, climate change and habitat loss through development.

If the UK is to make a full contribution to the Convention on Biological Diversity target to significantly reduce the current rate of global biodiversity loss by 2010, action in the Overseas Territories and Crown Dependencies is essential. JNCC contributes to the action needed by working closely with the governments of the Territories and Dependencies and with relevant UK departments – the Foreign and Commonwealth Office, the Department for International Development, Defra and the Ministry of Justice.

In 2007, JNCC identified nature conservation research priorities in the Territories and Dependencies. These included biodiversity monitoring and survey work and the impact of invasive species. Over the past year, JNCC has made considerable efforts to develop links with academia to address these research priorities.

A key aspect of this work has been the development of an Overseas Territories training and research programme in collaboration with the University of Reading. It aims to increase training and capacity building opportunities for individuals and organisations in the Territories, increase access to UK-based research and advisory expertise, and enhance knowledge transfer between Territories.

The programme is being driven by a steering committee made up of representatives from the Overseas Territories, which held its first meeting in January 2009. The programme has made contributions to two Territory research projects – one on red-footed booby *Sula sula* in the Cayman Islands, and another on coral reefs in the Turks and Caicos Islands. For further information, visit www.jncc.gov.uk/UKOTCD



Réunion landscape

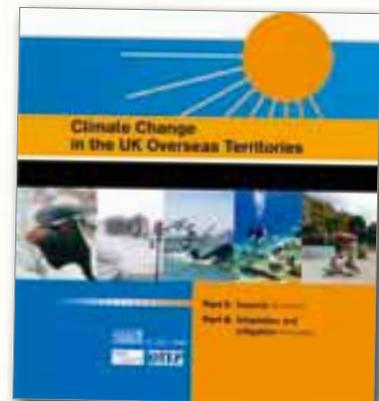
Climate change in the UK Overseas Territories – a suite of resources

In July 2008 JNCC participated in 'The European Union and its Overseas Entities: strategies to counter climate change and biodiversity loss', a conference initiated by the French Presidency of the EU. The conference was held on the Indian Ocean island of Réunion.

Nine of the UK Overseas Territories were represented and JNCC was represented by Overseas Territories Officer Tara Pelembe and Environmental Economics Adviser Deanna Donovan. The event focussed on the need to develop

partnerships at regional and international levels to address the challenges of climate change and biodiversity loss.

During the conference JNCC launched *Climate change in the UK Overseas Territories: an overview of the science, policy and you*, an accessible guide to climate change science, mitigation and adaptation. The book and supporting DVD highlight climate change impacts throughout the Territories, such as increased dengue fever outbreaks on Pitcairn Island, coral bleaching



in the British Indian Ocean Territory and increased cyclone intensity in the Turks and Caicos Islands.

© IUCN/Wiebke Herding

Defra provided JNCC with additional funding for work in the Overseas Territories in 2008/09. This funding has supported the instigation of a scholarship to support a student from the Overseas Territories to study a first degree in Applied Ecology and Conservation at the University of Reading. The scholarship is being managed by the UK Overseas Territories Association.

Defra funding has also supported a study of rockhopper penguin *Eudyptes moseleyi* populations on Tristan da Cunha, and has enabled JNCC to contribute to other projects in the Territories, including overviews of priority invasive species, geoconservation priorities, and amphibians and

reptiles. Defra also part-funded the JNCC co-ordinator post in support of the Agreement on the Conservation of Albatrosses and Petrels on the Falkland Islands.

JNCC's Overseas Territories and Crown Dependencies team was strengthened during the reporting year by the appointment of Nikki Chapman as Overseas Territories Fundraising Officer. The one-year post has been funded by the Department for International Development and the role involves identifying possible funding sources for nature conservation work in the Overseas Territories and giving support to funding applications by personnel in the Territories.

Island heather

Limonium bahamense

During the reporting year, additional funding was secured from Defra for a number of conservation projects in the Overseas Territories. One project this funding has supported is vegetation mapping on Turks and Caicos Islands, led by the islands' government. Accurate maps will support development planning by identifying areas of the islands important for rare and endangered species.

The Turks and Caicos are a group of more than 40 islands that form part of the Bahamas Archipelago. They are low-lying and more than half the land area consists of wetlands. Nine plant species are endemic to the islands, including the Turk Island prickly pear *Opuntia x lucayana* and island heather *Limonium bahamense*.

© RBG Kew, Michele Sanchez



The UK Overseas Territories and Crown Dependencies



The 14 UK Overseas Territories and three Crown Dependencies make a very significant contribution to global biodiversity. For example, of 26 priority species covered by the Agreement on the Conservation of Albatrosses and Petrels (ACAP), a dozen breed on UK Overseas Territories in the south Atlantic. The fourth meeting of ACAP's Advisory Committee was held at Cape Town, South Africa, in August 2008.

JNCC was represented at the meeting by Mark Tasker (vice-chair of the Advisory Committee) and Anton Wolfaardt (ACAP co-ordinator, UK south Atlantic Overseas Territories). Progress was achieved in a number of areas, including the development of a co-ordinated approach to interacting with Regional Fisheries Management Organisations (RFMOs), the development of a prioritisation framework, and agreement amongst Parties to propose the listing of the three north Pacific albatross species on Annex 1 of the Agreement at the next session of the Meeting of Parties.

Map © JNCC

South Atlantic

- British Antarctic Territory
- Falkland Islands
- St Helena and its associated islands, Tristan da Cunha and Ascension
- South Georgia and the South Sandwich Islands

Pacific

- Pitcairn Islands

Indian Ocean

- British Indian Ocean Territory

Wider Caribbean

- Anguilla
- Bermuda
- British Virgin Islands
- Cayman Islands
- Montserrat
- Turks and Caicos Islands

Europe

- Cyprus Sovereign Base Areas
- Gibraltar
- Bailiwick of Guernsey (Crown Dependency)
- Bailiwick of Jersey (Crown Dependency)
- Isle of Man (Crown Dependency)



Southern giant petrel *Macronectes giganteus* and wandering albatross *Diomedea exulans* on nests.
Bird Island, South Georgia

The Agreement on the Conservation of Albatrosses and Petrels (ACAP) is a multilateral agreement which seeks to achieve and maintain a favourable conservation status for species listed in Annex 1 of the Agreement, such as the southern giant petrel and wandering albatross shown here breeding at Bird Island, South Georgia. The UK, including on behalf of the relevant Overseas Territories (Falkland Islands, South Georgia and South Sandwich

Islands, the British Antarctic Territory and Tristan da Cunha) ratified ACAP in 2004, soon after the Agreement was formally established. Priority actions include reducing incidental bycatch of these seabirds in longline and trawl fisheries, and managing actively the critical threats at breeding sites, such as at Gough Island, where introduced house mice threaten the survival of the endemic Tristan albatross and other species.

© Anton Wolfaardt/JNCC

3

Global impacts



The UK's ecological 'footprint' extends well beyond national borders and JNCC is working to measure that footprint and to help Government understand the UK's impacts on global biodiversity

Economic activity in the UK and other developed countries is increasing the pressure for land-use change to satisfy rising demand for biofuels and food. Much of this change is occurring in the developing world, frequently in areas of high biodiversity value. The UK, therefore, has a responsibility to identify and quantify the nature of its impacts (both positive and negative) on global biodiversity.

JNCC's Global Impacts programme has analysed UK trade (specifically in food, forestry and biofuel products – see www.jncc.gov.uk/page-4213) and foreign investment data to identify the countries where biodiversity impacts may occur and through what mechanisms. JNCC's primary objective is to deliver this information to key partners across Government to support their global work on sustainable consumption and production. The emphasis is on linking evidence, analysis and policy.

The JNCC work focuses on three key global regions – South America, Sub-Saharan Africa and the former Soviet states – where, in the coming decade, land use change is likely to be most significant and have the greatest impact on biodiversity. These are areas that will be significant suppliers of food and biofuels to the UK and the rest of the EU.

The project's website (ukglobalinfluence.org) gives access to policy-relevant statistics on trade and business investment. It also provides short reports on thematic issues and links to national biodiversity data for countries with which the UK has strong economic ties.

To draw wider attention to the programme's work and the connections between our economy and global ecosystems, JNCC hosted an event at the London Stock Exchange in January 2009. An invited audience of more than 40 representatives from Government, non-governmental organisations and

industry were briefed on current and future JNCC work on the UK's 'footprint'. The event highlighted the UK's responsibility to recognise our economic dependence on overseas ecosystems for biomass products (food, biofuel and forest products) and our impact on these ecosystems through trade and investment. Beginning in autumn 2009, JNCC intends to produce an annual overview of the global biodiversity footprint of the UK economy, tracking changes through time as the UK economy adjusts and adapts to recent global financial, fuel and food crises.



Tony Weighell of JNCC (left) at the London Stock Exchange meeting
The biodiversity footprint of UK Foreign Direct Investment

In 2007, the UK economy was the second largest global source of Foreign Direct Investment. Three-quarters of that investment went into the developed economies of Europe and North America, but significant flows also went to economies in South America, Africa and the Commonwealth of Independent States (CIS) – Russia, Ukraine and Kazakhstan.

The JNCC report *The biodiversity footprint of UK Foreign Direct Investment* highlights

how that investment – £150bn in 2007 – can influence ecosystems in recipient countries. With large areas of undeveloped agricultural land, these countries are expected to be a significant future source of food and biofuels for the EU. Increased agricultural production will require significant investment, much of which will come from the EU.

© Luke Laletin/ JNCC





Feeding western lowland gorilla

Gorilla g. gorilla

The exploitation of columbium-tantalite (known as coltan), which is widely used in cellular phones, laptop computers and video games, has had major impacts on the forests and wetlands of the Democratic Republic of Congo. In turn, this is negatively affecting animals dependant on these habitats, including lowland gorillas, okapis, elephants and several species of monkey.

Concern about how the world's wetlands are suffering from the recent global expansion in extractive industries was expressed at the 10th Conference of the Parties to the Ramsar Convention on Wetlands in South Korea in

October 2008. Increases in demand for metals and other minerals have resulted in new extraction activity and in old mines and quarries being re-opened.

Ramsar and the African-Eurasian Waterbird Agreement have initiated a joint technical project that will review the impacts of extractive industry on wetlands and prepare best practice guidance for the sector. JNCC's tracking of UK investment overseas shows a decline in the flow into extractive industries to 2005 and then a sharp increase; in 2006, UK total investment in mining and quarrying (including oil and gas) was £18.5bn.

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4

European nature conservation advice



JNCC provides advice on European policies that have an influence on conservation of biodiversity and geodiversity in the UK

The European Union (EU) acts across a wide range of policy areas, many of which have direct effects on nature conservation. The influence of the EU is particularly strong in the area of environment policy and legislation. As a result, almost all JNCC work now has a European element. The primary focus for JNCC advice is the UK Government, as an EU Member State and a key player in the EU decision-making process. We also provide advice to the devolved governments for Northern Ireland, Scotland and Wales, as well as the country conservation bodies and, as appropriate, directly to EU institutions.

The overall aim of European work at JNCC is to ensure that nature protection is integrated across all policies and legislation developed in the EU. To influence the outcome of any EU initiatives effectively, JNCC gets involved with all interested parties as soon as possible in the development of policy.

Key to JNCC's success in this role are the UK Nature and Landscape Office in Brussels and the European Intelligence Service, which is provided by the Institute for European Environmental Policy. These services, run by JNCC in partnership with the country conservation bodies, jointly provide early intelligence and analysis of policy and legislative initiatives in the EU.

An important initiative supported by JNCC during the reporting year is the review of The Economics of Ecosystems and Biodiversity (TEEB) led by Pavan Sukhdev, the Managing Director and Head of Global Markets of Deutsche Bank India. He was welcomed by JNCC Chair, Peter Bridgewater, as

**UK Nature and Landscape
Office (UKNLO)**
Brussels

The contract JNCC holds with the Institute for European Environmental Policy (IEEP) is an example of how we work closely with other organisations to enhance the quality and breadth of intelligence, analysis and advice we are able to provide. The mechanism provides intelligence and analysis on EU policy for or affecting the environment, to JNCC and the country conservation bodies.

IEEP has offices in London and Brussels, and the UK Nature and Landscape Office, the Brussels base for JNCC and the country conservation bodies, is co-located with IEEP's office in Brussels, which provides excellent opportunities to facilitate the work of both organisations.

© Hugh Laxton/JNCC



guest of honour at an evening reception held in June 2008 at the residence of the UK Permanent Representative to the European Union in Brussels. The event, which was attended by officials from the European Commission, members of the European Parliament, EU Member State governments and other key organisations, as well as the chairs and chief executives of the UK country conservation bodies, was held during the European Commission's Green Week and reflected its theme "Only one Earth – don't waste it".

The TEEB project aims to provide a practical toolkit for policy makers linking science and economics. Mr Sukhdev suggested that only when we 'capture' the value of ecosystems and give them a price will

we be able to persuade society – and governments – to attach sufficient priority to protecting them.

JNCC also played an important role in the Streamlining European Biodiversity Indicators 2010 (SEBI) project as one of the consortium members of the European Topic Centre on Biological Diversity. The project has developed a suite of 26 indicators to measure progress towards the EU's target to halt the loss of biodiversity in Europe by 2010. They include indicators that measure pressures on biodiversity (such as nitrogen deposition), the state of biodiversity (for example, measures of species and habitat diversity) and responses (such as funding and public opinion).

Negotiations on climate change and energy dominated debate on EU environmental policy for much of the year. JNCC was actively engaged with the UK Government and the European Commission on the development of the EU's Renewable Energy Directive, and in particular, JNCC provided advice on sustainability criteria for biofuel and biomass production. JNCC was also involved in assessing future EU policy on adaptation to climate change.

JNCC also continues to advise Defra on the implementation of the EU Habitats and Birds Directives. The UK list of terrestrial Special Areas of Conservation (SACs), declared under the Habitats Directive, is close to completion and the first offshore marine candidate SACs were submitted to the European Commission in September 2008 (see Chapter 8).



Author of *The Economics of Ecosystems and Biodiversity*, Pavan Sukhdev and JNCC Chair Peter Bridgewater
The residence of the UK Ambassador to the European Union, venue for the UKNLO reception

The mismatch between usefulness and value was identified by Adam Smith in 1776. "Water is very useful but not valued," he wrote, "while diamonds are given a high value but are not that useful."

Smith's thoughts on value open Pavan Sukhdev's preface to the interim report *The Economics of Ecosystems and Biodiversity*, which was published in 2008. He notes that while nature is a source of much

value to human communities, it mostly bypasses markets and defies valuation. The lack of valuation is, he argues, an underlying cause for the degradation of ecosystems and biodiversity loss.

The project now aims to finalise a science and economics framework that will make ecosystem valuation a practical tool. It also hopes to provide a toolkit for policy makers.

@veldeman-photo-brussels.be



Red-ruffed lemur *Varecia rubra*
Masoala National Park, Madagascar

Among the case studies of the TEEB report is an analysis of the ecosystem benefits derived from the forests of Masoala National Park in Madagascar. It puts estimated value on the 'services' the forest provides including recreation where thousands of tourists visit the forest to see red-ruffed lemurs *Varecia rubra* and other unique flora and fauna, valued at some US\$ 5,160,000. Other 'services' are:

- **Medicines:** Rainforest plants have potential as medicines. For example, one species of periwinkle is used as a source of an anti-cancer drug. US\$ 1,577,800;

- **Erosion control:** Forests protect against soil erosion, preventing silting of rice paddies and fish nurseries. US\$ 380,000;
- **Carbon storage:** Thriving forest reduces the impact of climate change. US\$ 105,110,000;
- **Recreation:** Thousands of tourists visit the forest to see red-ruffed lemurs *Varecia rubra* and other unique flora and fauna. US\$ 5,160,000;
- **Forest products:** Local families use forest products each day, including foods and materials for building and weaving. US\$ 4,270,000.

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5

Sustainability advice



The provision of advice on nature conservation in the wider context of sustainable development is a growing area of work for JNCC

The rise of the sustainable development agenda has brought with it a growing recognition of the inter-dependence of the environment, society and the economy. Greater understanding of these connections has resulted in JNCC, and the nature conservation sector more widely, paying greater attention to economics. During the reporting year we worked to build capacity in environmental economics both within JNCC and with our partners. JNCC's work in this area has been developed within the context of the changing economic environment worldwide.

Economic valuation of natural features continued in the UK Overseas Territories, supported by JNCC's environmental economics toolkit. Significant progress has been made with valuation of the uplands of Montserrat, a study of the value of coral reefs to the people of Bermuda and a valuation of mangroves in the Cayman Islands. We also organised a workshop on the economic assessment of biodiversity and ecosystem services at 'The European Union and its Overseas Entities: strategies to counter climate change and biodiversity loss', a conference held on the Indian Ocean island of Réunion in July 2008 (see Chapter 2).

JNCC is also making a contribution, through Defra, to The Economics of Ecosystems and Biodiversity (TEEB), a major investigation of environmental economics (see Chapter 4).



San Bushman healer digging out a yellow scorpion
Kalahari, Botswana

What is 'idle land'? Worldwide demand for space to grow crops for food and energy has made land use a major issue for JNCC and has put the focus on decision-making around the future of land not currently used for crop production.

Should areas that are not being used for agriculture or forestry be labelled 'idle'? By definition, 'idle' means 'ineffective, worthless, having no specific purpose', but when applied to land the term is subjective and is normally associated with land not being used to provide a product that is valued by society.

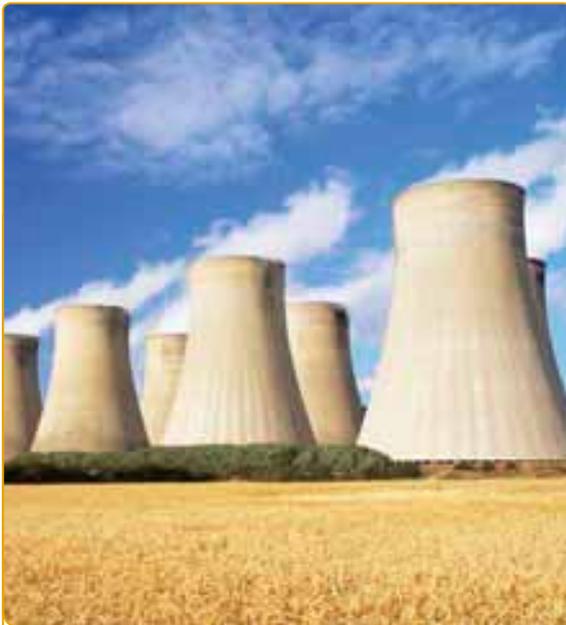
This idea of land as idle fails to recognise the wide range of goods and services provided by the environment in the widest context: direct benefits like wild foods, fuel

and medicines and less obvious ones like water filtration and climate regulation.

A more useful way of thinking about the value of land would be one that avoids a view based on production of a commodity and takes a more holistic approach. A more complete valuation of land potential would take into account all the goods and services provided by an area of land, such as its carbon storage potential, biodiversity, fuel, food and even its cultural significance to local people.

The deserts of Botswana provide a full range of goods and services to the San Bushmen. For example medicines and poisons for hunting are extracted from plants, snakes and scorpions. Here a healer is digging for yellow scorpion.

© David Cardinal/ Cardinal Photo/photographersdirect.com



Conservation impacts of energy production
Cooling towers of coal fired Ratcliffe on Soar Power Station, Nottinghamshire, UK

All energy production options have some impact on the environment and this presents a challenge for policy-makers. The Institute for European Environmental Policy's report sets out to make science-based judgments about the technologies – both fossil fuel and renewable – that are available to the UK. The report says there is evidence to indicate that several habitats and species would be threatened if future developments do not avoid sensitive sites.

The study highlights the pros and cons of each of the options. For example, while a new coal power station takes up a relatively small area of land, its 'footprint' is large as it produces large amounts of carbon dioxide and polluting gases such as nitrogen and sulphur oxides.

By contrast, biofuel production involves large areas of land, both within the UK and in other parts of the world, and associated habitat transformation may lead to significant losses of biodiversity. Although biofuels have the potential to emit less greenhouse gas than fossil fuel alternatives, they are not necessarily carbon neutral as there is a carbon cost associated with their production and transport.

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Biofuels continue to be a priority for JNCC's Sustainability Advice team, and were the subject of intense discussion at the ninth Conference of the Parties to the Convention on Biological Diversity (CBD) in Bonn in May 2008 (see Chapter 1), where Diana Mortimer, JNCC Head of Sustainability Advice, led UK input to discussions. The conference recognised that the CBD has a role in biodiversity-related aspects of the sustainable production and use of biofuels, and reached an agreement that the CBD secretariat should compile information and evidence on the impacts of biofuels on biodiversity and convene regional workshops on the sustainable production and use of biofuels.

During 2008/09, JNCC responded to UK and European Union consultations on the future of biofuels, including the EU's draft Renewable Energy Directive. Over the coming year, JNCC will continue to work with Defra and the Department of Energy and Climate Change on the issue, particularly in the area of sustainability criteria.

JNCC contributed to a UK Government consultation on a draft Renewable Energy Strategy in 2008, and in parallel with this we commissioned a report from the Institute for European Environmental Policy on *Conservation impacts of energy production*, which looked at the potential influence of different energy options on UK biodiversity. The report concluded that the impacts of future developments of each energy technology will vary widely as a result of scale of use, location and the degree to which mitigation measures are identified and implemented. It points to the risks and rewards in the areas of biodiversity and geodiversity that should be factored into energy policy.

During the year, JNCC and the Inter-Agency Climate Change Forum provided both written and oral evidence to the Royal Commission on Environmental Pollution in relation to its current study on adaptation to climate change.



Giant hogweed *Heracleum mantegazzianum*
Invasive Non-native Species Framework Strategy launch

The spread of invasive non-native species is one of the biggest threats to global biodiversity and has a major impact in the UK. Giant hogweed is one of a number of highly invasive plants that were first introduced to Britain as ornamental garden species.

Giant hogweed can grow to five metres in height. It flourishes in wet areas such as riverbanks, marshes and damp woodland, and soon shades out other plants. It is also a human health issue as its sap contains a substance that causes skin blistering.

Giant hogweed is one of the plant and animal species that is targeted by a new Invasive Non-native Species Framework Strategy for Great Britain, which was launched in May 2008. The strategy is the first co-ordinated plan to address the threat to our biodiversity from invasive non-native species; an all-Ireland strategic approach is being developed by the Northern Ireland Assembly and the Republic of Ireland Government.

The GB approach involves prevention of new introductions, early detection and rapid response when new introductions occur, and longer-term control programmes for problem species based on sound science.



In England, the strategy was launched by Environment Minister Jeff Rooker, and in Scotland by Michael Russell, Minister for the Environment, Scottish Government. The GB Strategy was launched in Wales by Jane Davidson, Environment, Sustainability and Housing Minister for the Welsh Assembly Government, shown here spraying giant hogweed, an invasive non-native plant.

Giant hogweed © Duncan McEwan/naturepl.com
Group photo © Margaret Underwood



Montserrat oriole *Icterus oberi*

Adult male on Montserrat

A presentation of an economic valuation assessment of Montserrat's Centre Hills was a feature of a JNCC-led workshop at the Réunion conference in July 2008. The Centre Hills are important to nature conservation on the island as habitat to a wide range of species, including the Montserrat oriole. The oriole is the island's national bird and is listed as Critically Endangered by the International Union for the Conservation of Nature and Natural Resources (IUCN).

Funded by the Overseas Territories Environment Programme, the economic valuation study has investigated the market value of the hills to farming and tourism and their non-market values as suppliers of ecosystem services, for example maintaining water quality and controlling erosion. The study's outcomes will help decision-makers to appreciate the costs and benefits of different development scenarios and the influence they could have on the environment.

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6

UK nature conservation advice



We provide advice on policies, strategies and initiatives that have an impact on nature conservation across the UK as a whole, and maintain standards that provide a consistent framework for UK nature conservation

A major commitment during the reporting year was the completion of the five-yearly review of Schedules 5 and 8 (which list protected species) of the Wildlife and Countryside Act 1981, the legislation that is at the core of nature conservation in Great Britain (Northern Ireland has its own Wildlife Order (1985)). The outcome of the review was a set of recommendations for changes to the schedules that were submitted to Ministers in December 2008.

Consultees put forward more than 100 species for additional protection under the Act. The list was subjected to a rigorous process that assessed the scientific basis of the argument for inclusion and the benefits that might come from protection. In the ministerial submission JNCC recommended that 11 animal species be added to Schedule 5, including the pool frog *Pelophylax lessonae*, (northern clade only), the common skate *Dipturus batis* and the pine hoverfly *Blera fallax*.

In addition, two plant species were proposed for addition to Schedule 8: the rock nail lichen *Calicium corynellum* and lungwort *Lobaria pulmonaria*. Three animal species and five plant species were proposed for removal from the schedules, either because they are now known to be more widespread than they were previously thought to be, or because of extinction.



Jurassic coastline at Brandy and Hobarrow Bay, Kimmeridge
Fossil Reptiles of Great Britain, GCR volume 10

A recent addition to the body of Geological Conservation Review material that is available on the web is Volume 10 *Fossil reptiles of Great Britain*, which deals with a very popular aspect of Britain's geology. Britain's 500 or more fossil reptile sites include examples from the Jurassic, the time of marine reptiles such as plesiosaurs and ichthyosaurs. The volume gives details of 50 locations that are judged to be of greatest special scientific interest. They are spread throughout Scotland, Wales and England, but the greatest

concentration of sites is to be found along the 'Jurassic Coast', the section of the Dorset and Devon coastline that was designated as a natural World Heritage Site for the richness of its geology. At Kimmeridge Bay and Brandy Bay on the coast of Purbeck, Dorset, the Late Jurassic fossil marine reptile and terrestrial vertebrates recovered from this locality are relatively abundant – for such rare fossils – and the most diverse from rocks of this age anywhere in the world.

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In January 2009, JNCC hosted the fifth meeting of the Wildlife Law Enforcement Working Group at Peterborough. The group, which is chaired by JNCC, provides the police and other enforcement agencies with advice on priorities for wildlife law enforcement from a nature conservation perspective. It brings together representatives from a wide range of organisations, including the country conservation

bodies, Royal Botanic Gardens Kew, the Association of Chief Police Officers, the National Wildlife Crime Unit, Defra and non-governmental organisations.

The priorities identified by the group are freshwater pearl mussel *Margaritifera margaritifera*, birds of prey, bats, and species covered by the Convention on International Trade in Endangered Species.



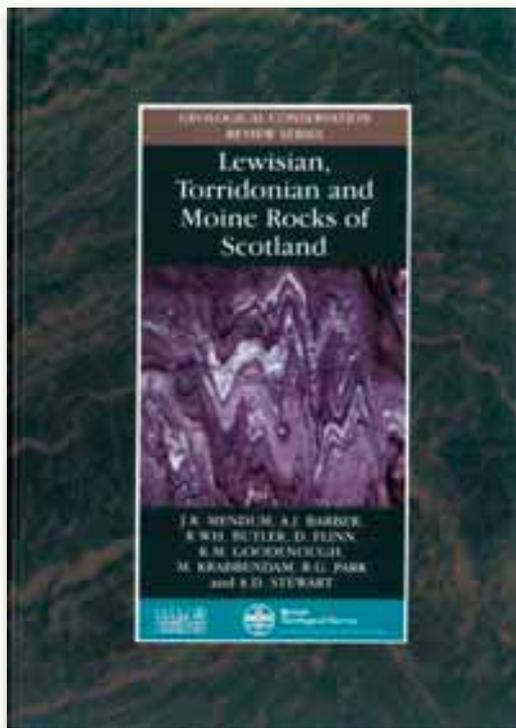
Freshwater pearl mussel *Margaritifera margaritifera*
River Kerry, North Highland Area, Scotland

The freshwater pearl mussel is widespread in rivers throughout the west and north of Great Britain, but is now very rare. Scotland is one of the European strongholds for the species.

The age profile of surviving populations is an issue for the future of the species. Mussels do not reach reproductive maturity until at least 12 years of age, but can live for more than 120 years.

Some rivers are home to only a few mussels and if younger individuals do not survive the population will not have a future. Population declines have been caused by a number of factors including pollution, acidification, silting and river engineering. Pearl-fishing was a significant pressure, but is now illegal – enforcement of the legislation is a priority identified by the Wildlife Law Enforcement Working Group.

© Sue Scott/SNH



Lewisian, Torridonian and Moine Rocks of Scotland
 JR Mendum, AJ Barber, RWH Butler, D Flinn,
 KM Goodenough, M Krabbendam, RG Park and
 AD Stewart

This volume describes the outcrops of Precambrian rocks that lie north-west of the Great Glen in the North-west Highlands of Scotland and in the Outer Hebrides and parts of Shetland. The rocks and their convoluted history chart the first 2,700 million years of the geological development of Great Britain. They formed when continents were in far different positions to those seen today and provide tantalising fragmental evidence of continent collisions, lost volcanic arcs, and long-disappeared oceans. The Geological Conservation Review sites encompass a very wide range of rock types of different ages, affected by tectonic processes that have occurred over many millions of years. The mountain scenery of the North-west Highlands in places strongly reflects these varied rock-types.

© JNCC

During the reporting year, JNCC continued to work closely with the habitat Lead Co-ordination Networks, which comprise specialists from the nature conservation bodies in England, Northern Ireland, Scotland and Wales. The focus of this work was the creation of an online reference tool for practical habitat management advice that will be accessible via a portal on JNCC's website. The work was well advanced by the end of the reporting year and the site is expected to go live in 2009.

JNCC has continued its longstanding commitment to the Geological Conservation Review (GCR) project, which describes the most important geological sites in Britain in a series of publications, which will comprise 45 volumes when completed. Northern Ireland has an equivalent, the Earth Sciences Conservation Review. During the reporting year, volume 34, *Lewisian, Torridonian and Moine Rocks of Scotland*, was published.

At the same time, JNCC has continued to make GCR information available in a free, downloadable form at the GCR website – 20 volumes are now available at www.thegcr.org.uk

A new area of work for JNCC is the provision of secretariat services to the UK Geodiversity Action Plan (UK GAP). There are currently around 30 local Geodiversity Action Plans and the new UK GAP initiative aims to create an upper tier plan that will form a framework embracing geoconservation nationally, regionally and locally.

The partnership that is developing the UK GAP includes JNCC, the country conservation bodies, local authorities and extractive industry representatives. JNCC has been asked to support the partnership's work, which has included hosting a website www.ukgap.org.uk



Lungwort *Lobaria pulmonaria*
Growing on hazel, Inverness-shire

Recommended for protection under the Wildlife and Countryside Act, lungwort is a large, eye-catching lichen. It is found in the damp woodlands of western and northern Britain and Ireland. The plant is collected

for use in traditional medicines and the species is thought to be vulnerable to commercial exploitation. It is recommended that protection should outlaw both collection and sale.

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7

Marine management advice



JNCC advises Government on activities in the marine environment that affect nature conservation, including fisheries, mineral extraction and renewable energy developments

Nature conservation in the marine environment has taken an increasingly high profile on the JNCC agenda and this area of our work continued to grow during the reporting year. Following on from JNCC's earlier work in relation to the Review of Marine Nature Conservation and the Irish Sea Pilot, JNCC has been closely involved in preparatory work in anticipation of major changes in legislation covering the marine environment. The Marine and Coastal Access Bill was introduced into the Westminster Parliament in December 2008, and is expected to complete its passage through Parliament by autumn 2009. The Marine (Scotland) Bill was introduced in April 2009. JNCC has offered advice to both the UK and Scottish Governments and has responded to formal consultations on the legislative proposals.

At the same time, JNCC has continued to play its role in helping to manage the impacts on biodiversity of existing human uses of the marine environment. During 2008/09, JNCC drew up draft guidance for users of the sea on how to avoid disturbing cetaceans (dolphins, porpoises and whales) in recognition of an obligation under the EU Habitats Directive to minimise disturbance.

Throughout the year, JNCC staff provided advice concerning offshore industries. This included a detailed response to a Strategic Environmental Assessment of offshore energy development by the Department of Energy and Climate Change (DECC), which covered potential

locations for oil and gas exploration and for new windfarms in the seas around the UK. JNCC advises DECC on the nature conservation implications of offshore energy throughout all stages of development, from planning to production and

through to decommissioning. In addition, energy companies are encouraged to consult with JNCC during the design stages of projects so that they can be aware of any nature conservation issues that may result from their activities.



**Fishing trawler heading out to sea
Shetland, Scotland**

The north-east Atlantic, including the seas around the UK, includes some of the world's most productive fisheries – annual landings account for about a tenth of the total world production of fish. This total includes fish for human consumption, industrial fishing and shellfish fisheries. Fisheries can have an adverse effect on marine biodiversity, for example through damage to the seabed and bycatch of non-target species. During the year, JNCC staff spent a significant amount of time preparing

for a review of the EU Common Fisheries Policy, which will be completed in 2012. JNCC is working with other organisations to ensure that implementation and further reform of the EU Common Fisheries Policy takes full account of biodiversity. JNCC fisheries staff were also closely involved in the public consultation on the first offshore Special Areas of Conservation, which were submitted to the European Commission in September [see Chapter 8].

© David Tipling/naturepl.com

JNCC deals with more than 400 consultations a year in this area. During the reporting year there was a substantial increase in the number of consultations that dealt with new offshore renewable energy projects, a trend that is expected to continue in future years.

There was also a similar upswing in the number of consultations for the offshore extraction of

marine sand and gravel, reflecting increased demand for house building in the south-east of England and for the London Olympics. JNCC made a contribution to Regional Environment Assessments for aggregate extraction by the Crown Estate for the Eastern English Channel and the Outer Thames Estuary.



Offshore aggregate gravel extraction
The 'Sand Falcon'

The marine aggregate industry has made a voluntary commitment to ensure regional sustainability of marine sand and gravel extraction by undertaking Regional Environmental Assessments (REAs) for key areas of activity. JNCC and the country conservation bodies are involved in the REA process, and JNCC and Natural England are members of the Regulatory Advisors Group, which has developed principles, guidance

and methodologies for the REAs. The trailer suction hopper dredger 'Sand Falcon', operated by CEMEX UK Marine Ltd, is typical of the modern purpose-built marine aggregate dredgers that operate in licensed areas off the coast of England and Wales. The vessel was built in 1998, and has a hopper capacity of 8,500 tonnes of sand and gravel.

© BMAPA



Balearic shearwater *Puffinus mauretanicus*
Seabirds and bycatch

The problem of seabirds being caught as bycatch during fishing operations was discussed at a meeting in March 2008 of the International Council for the Exploration of the Sea (ICES) seabird ecology expert group, which is chaired by JNCC's Jim Reid. Following that meeting, advice was delivered by ICES to the European Commission in May 2008. The Commission is now expected to compile a plan of action to reduce seabird bycatch throughout EU waters.

Bycatch is a particular problem for the Balearic shearwater, a critically endangered species that breeds around the Balearic Islands and occurs in waters off south-west Britain during the non-breeding season. In the Mediterranean, Balearic shearwaters are vulnerable to bycatch during longline fishing.

© Tom Brereton

8

Marine mapping and area protection



JNCC provides advice on the mapping of the marine environment and on identifying marine protected areas

Rapid growth in JNCC's marine work during the year prompted the creation of a Marine Protected Sites team and the recruitment of additional staff to deal with the growing workload.

JNCC continued to provide advice to Government on the identification of offshore Special Areas of Conservation (SACs), which will contribute towards the Natura 2000 network of protected areas within the European Union. The public consultation on the first seven offshore SACs closed in March 2008 and attracted comments from 38 stakeholders representing a wide range of interests, including energy, fishing and environmental groups. JNCC assessed the responses, reported the outcome, and considered the scientific issues raised in consultation with Government. Adjustments were made to the site recommendations, and five sites were formally submitted by Defra to the European Commission in September 2008. The five sites are:

Braemar Pockmarks and **Scanner Pockmarks** in the northern North Sea – both of these consist of undersea carbonate structures formed by leaking methane gas. The structures provide shelter for fish and other species within crater-like seabed 'pockmarks'.

Haig Fras, a granite outcrop 95km west of the Isles of Scilly. The only substantial area of rocky reef in the Celtic Sea supports a wealth of species, including pink and orange anemones, corals and sponges.

Stanton Banks, a range of granite 'hills' on the seafloor south of the Outer Hebrides. The tops of the outcrops are colonised by red algae and a variety of sponges, while the slopes shelter communities of red and orange featherstars and dead man's fingers.

The Darwin Mounds are a series of unique cold-water coral reefs off north-west Scotland that provide a habitat for a wide range of invertebrates, including sponges and starfish,

and fish. The mounds rise to five metres above the level of the surrounding seabed.

The remaining two sites consulted upon in 2008 are North Norfolk Sandbanks and Saturn Reef in the North Sea and Wyville Thomson Ridge off north-west Scotland. Both are expected to be submitted to the European Commission as soon as possible following resolution of issues raised during the consultation.



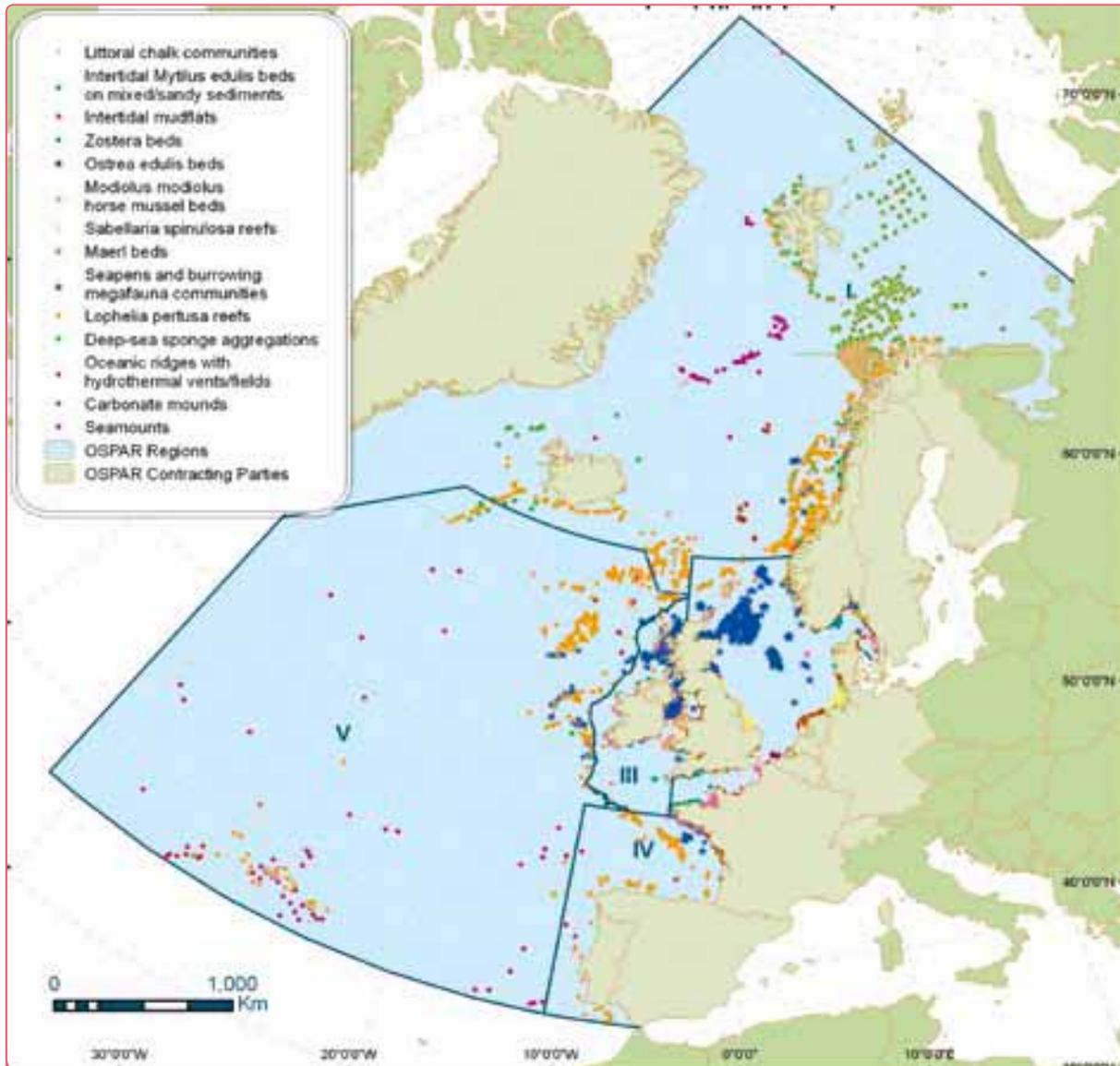
Crescent Harbour, Sitka, Alaska

Sitka hosted the GeoHAB 2008 conference

JNCC was able to share its expertise in seabed mapping through involvement in the GeoHAB 2008 conference in Alaska in April 2008. The conference brought together geologists, biologists, ecologists and fisheries scientists to exchange ideas. JNCC was represented at the meeting by Mark Tasker (vice-chair of the Advisory Committee) and Anton Wolfaardt (ACAP co-ordinator, UK south Atlantic Overseas Territories). Progress was achieved in a number

of areas, including the development of a co-ordinated approach to interacting with Regional Fisheries Management Organisations (RFMOs), the development of a prioritisation framework, and agreement amongst Parties to propose the listing of the three north Pacific albatross species on Annex 1 of the Agreement at the next session of the Meeting of Parties.

© Neil Golding/JNCC



OSPAR habitats map

Sabellaria spinulosa reefs can be found off the coast of Hunstanton, Norfolk

JNCC played an important role during the reporting year in the preparation of quality status reports for threatened marine habitats in the OSPAR area (north-east Atlantic). We led on the assessment of three habitats – cold-water coral reefs, horse mussel beds and littoral chalk communities. The latter is a very rare habitat type in the north-east Atlantic and includes the chalk cliffs and

shores of the English south coast and the coast of northern France. Rare algal communities are found on the rock faces and in the caves that the sea carves into the soft white rock.
 World Vector Shoreline © US Defense Mapping Agency. OSPAR Regional boundaries © OSPAR Commission 2009. Map © JNCC 2009. Photograph © M Murphy



Four more offshore areas were formally recommended to Defra as draft SACs in 2008/09. Dogger Bank and Bassurelle Sandbank have been proposed because they are examples of offshore sandbank habitats. Both sites extend into the waters of other Member States: Dogger Bank extends into Dutch and German waters and Bassurelle Sandbank extends into French waters. JNCC has been working closely with colleagues in those countries on aligning site recommendations across Member State boundaries and also on early discussion of future management measures that may be required.

The other two draft SACs, North-West Rockall Bank and Hatton Bank, are in the north-east Atlantic. Both sites have been proposed for their bedrock and the rich cold-water coral reef communities they support. The reefs provide shelter for a wide range

of species, including anemones, sea cucumbers and sea squirts.

JNCC has also been working with Natural England to prepare SAC recommendations for two sandbank and reef areas in the outer Wash and off the north Norfolk coast area of eastern England. Whilst both sites have inshore and offshore elements to which different regulations apply, we have prepared single site documentation to overcome any confusion amongst stakeholders.

These sites are likely to be subject to public consultation in 2009 and early 2010. JNCC and Natural England have held a number of pre-consultation meetings with key stakeholders to familiarise them with the proposals and answer questions. Meetings have been held with regulators



The white cliffs of Dover

Example of a littoral chalk community

Photo to landward of The Chalk, between Kingsdown and Dover, Kent. The area has a high conservation value as not only an OSPAR site (see opposite page), but also as a site important for its coastal geomorphology and the

geology of its cliffs. Although this is a rock cliff, the material is effectively a biological deposit, made almost entirely of the remains of ancient sea creatures, but now hosts a wealth of present-day biodiversity.

© Vincent May

and industry groups in the UK representing the main industry sectors (including oil and gas, fisheries, aggregate extraction and renewable energy). JNCC has also had meetings with fishermen at a European level through the European Commission's Regional Advisory Councils for the North Sea, North Western Waters, and Pelagic Waters. As well as the pre-consultation meetings, JNCC has assessed the likely socioeconomic impact of site designations.



**Drop-down underwater camera system
Survey work off Solan Bank**

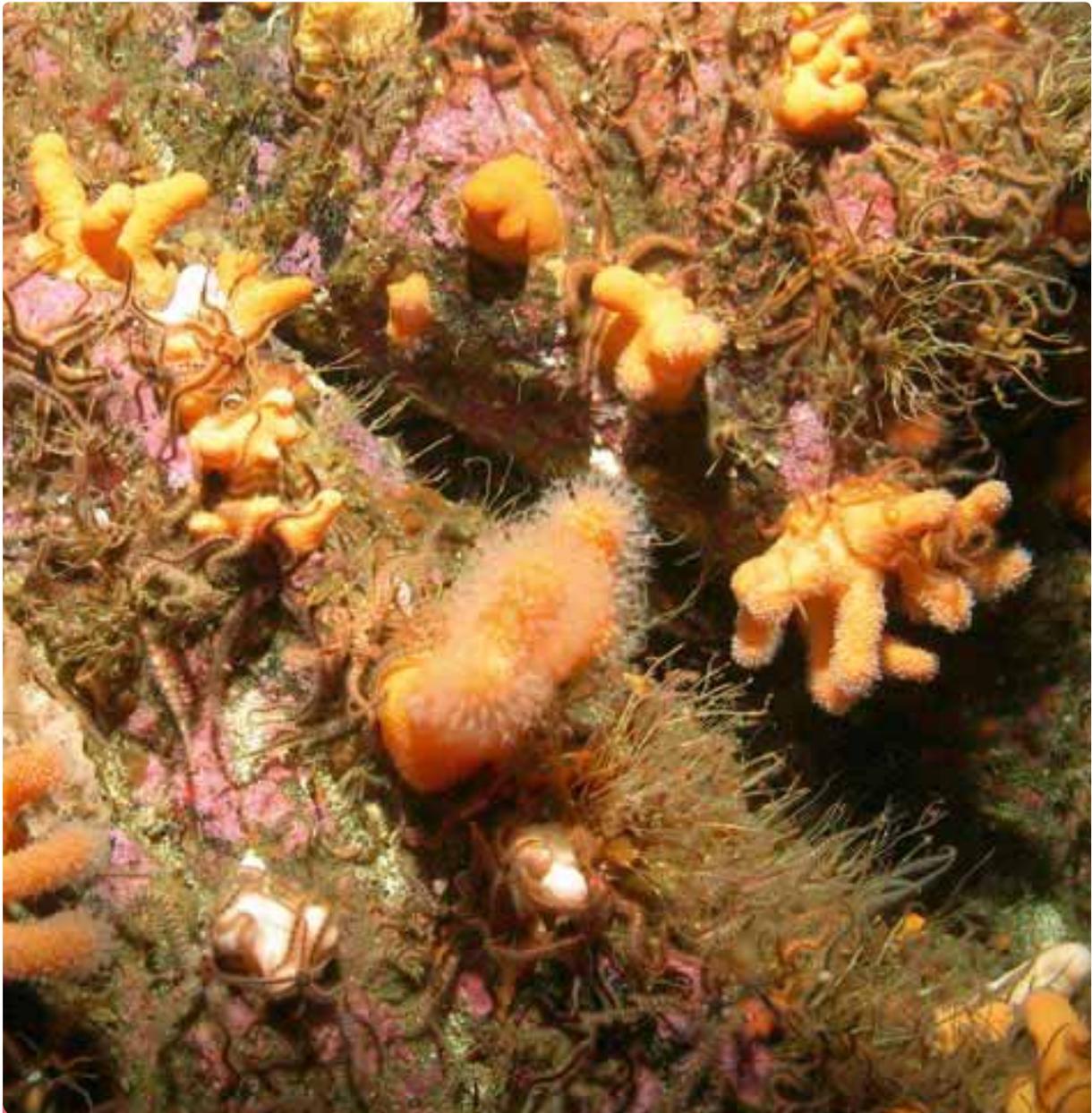
During 2008 the JNCC surveyed and mapped the seabed habitats of three areas within the UK offshore marine area. Acoustic techniques such as multibeam and sidescan were used to gain an indication of the seabed morphology. Techniques such as Hamon grab sampling, photographs and video were then used to 'ground truth' the acoustic data and develop seabed habitat maps.

© Neil Golding/JNCC

JNCC also continued its offshore survey programme to identify the seabed areas that may be recommended to Defra as offshore SACs. In April 2008, the Centre for Environment, Fisheries and Aquaculture Science (Cefas) surveyed parts of the Dogger Bank for JNCC to provide new and more comprehensive information to support our revised site recommendation to Defra in November 2008. We also commissioned two further surveys in the offshore marine area in 2008. The first targeted an area of submarine structures in the mid-Irish Sea. These carbonate structures are reef-like and provide a unique habitat for a wide range of marine life. The second survey was of an area of bedrock and stony reef around the Solan Bank, off northern Scotland.

During the reporting year, JNCC continued work to identify areas of the sea around bird colonies that should be covered by extensions of Special Protection Areas (SPAs) identified under the EU Birds Directive. Work was completed to identify red throated diver *Gavia stellata* feeding areas near to breeding sites in Scotland, and recommendations will be made in collaboration with the Scottish Government and Scottish Natural Heritage. In addition, other areas were identified that could be proposed as SPAs for seabirds, and further work was carried out to identify possible SPAs for inshore species such as ducks and divers.

The new Marine Bills (see Chapter 7) make provision to establish a network of Marine Protected Areas around the UK. In preparation for the Marine and Coastal Access Bill achieving Royal Assent, JNCC is collaborating with Natural England on a Defra-funded project to design and take forward a process to identify Marine Conservation Zones in English waters and offshore waters adjacent to England and Wales with full stakeholder involvement. We are also working with Scottish Government and Scottish National Heritage to establish a project to identify Marine Protected Areas in Scottish offshore waters.



Soft corals and brittlestars
Solán Bank, north-east Scotland

Some 50km north of Cape Wrath, Scotland, Solán Bank is an exposed bedrock outcrop that stands 100 metres above the surrounding seabed and almost reaches the sea surface.

In the shallower areas, lush kelp forests cover the rock and are grazed by purple sea urchins. Deeper down,

craggy bedrock ridges form cliffs that are encrusted with orange and white soft corals known as dead man's fingers *Alcyonium digitatum*. Special instruments that take images of the sea floor using sound were towed behind a survey vessel, while an underwater camera was used to capture video and stills from the depths.

© JNCC

9

Surveillance and monitoring



Working with partners, JNCC tracks trends in plant and animal populations and habitats across the UK

If UK and devolved governments are to assess whether they are meeting their environmental targets and to identify any areas where policy needs to be adjusted, it is vital that they have access to up-to-date information. Biodiversity surveillance provides information about the fate of species and habitats and also highlights the impacts of factors affecting biodiversity, such as habitat change, climate change and non-native species.

JNCC is a key player in country and UK-level biodiversity surveillance and monitoring, and supports a wide range of schemes that gather data on animal and plant populations and habitats.

There are around 100 schemes that keep track of one or more biodiversity components at a country or UK scale. This is more than for any other single sector of environmental monitoring and reflects the wide range of species and habitats that need to be recorded. Schemes are funded by public bodies, research organisations, non-governmental organisations and societies. The UK benefits from a culture of species recording by amateur naturalists,

What do we mean by surveillance?

The word 'surveillance' originates from the French to 'watch over', and may be used interchangeably with 'monitoring' (which we see as 'surveillance against a pre-set standard[s]'). Both imply repeated recording over time. 'Sampling', 'recording' and 'observation' may be one-off events, or form part of a surveillance or monitoring scheme. JNCC supports all these activities, however defined, that help to reveal the state of biodiversity.

and volunteers play an invaluable role in carrying out field recording.

JNCC spends more than £1 million a year on biodiversity surveillance, most of which is delivered through long-term partnerships with organisations such as the British Trust for Ornithology, the Centre for Ecology and Hydrology and Butterfly Conservation. Over the past year, JNCC has continued to play a leading role in the development of a terrestrial biodiversity surveillance strategy for the UK. We published details of this strategy on the JNCC website in July 2008 at www.jncc.gov.uk/page-4425 – this

coincided with the launch of the UK Environmental Observation Framework, which is working towards a complete framework for all environmental observation and monitoring. There has been close collaboration between JNCC and the country conservation bodies in this area.

The terrestrial biodiversity surveillance strategy is designed to ensure that the UK has sufficient surveillance in place to meet UK conservation and reporting objectives. It also aims to improve efficiency in sampling design and analysis, for example by using one dataset many times for many purposes.



Chiffchaff being ringed
Phylloscopus collybita

Attaching uniquely marked lightweight metal rings to the legs of birds has been used in Britain and Ireland as a way of monitoring their populations since 1909. Bird ringers are trained and licensed by the British Trust for

Ornithology to catch and handle birds, ensuring that high welfare standards are met and high quality information is being obtained for scientific purposes.

© Dawn Balmer/BTO

Partners in surveillance

A wide range of partners play a role in surveillance and monitoring schemes in the UK, with volunteers putting in a total of 40,000 hours of effort each year on these named schemes alone.

Birds:

Breeding Bird Survey (BTO, JNCC, RSPB)

3,604 1km squares in UK surveyed three times in 2007, covering 101 species. Scheme started in 1994.

Rare Breeding Birds Panel collation of breeding bird reports (RBBP, JNCC, RSPB, BTO)

Around 8,000 sites in UK reported on annually, covering 130 species. Scheme started in 1972.

Nest Record Scheme (BTO, JNCC)

34,202 records in GB submitted in 2005, covering 90 species. Scheme started in 1939.

National Ringing Scheme (BTO, JNCC)

Around 880,000 birds ringed each year of 270 species, including birds from 120 Constant Effort Survey (CES) sites and 100 Retrapping Adults for Survival (RAS) studies. National scheme started in 1909, whilst CES started in 1983, and RAS in 1998.

Wetland Bird Survey (BTO, JNCC, RSPB, WWT)

Around 2,000 wetlands in GB monitored up to once a month for waders and other waterbirds. Over 100 species recorded. Scheme started in 1947.

Goose and Swan Monitoring Programme (WWT, JNCC)

Thirteen goose and swan populations monitored in the UK. Scheme started in 1955.

Seabird Monitoring Programme (JNCC, CEH, NTS, RSPB, SG, SOTEAG)

All 26 species of regularly breeding seabirds monitored at a sample of colonies in the UK, since 1984.

Invertebrates:

The UK Butterfly Monitoring Scheme (BC, CEH, JNCC, CCW, Defra, NE, NIEA, FC, SGov, SNH)

Includes transect walks and timed counts. Butterflies counted on 850 transects, 16 times a year. 63 species have data collected regularly, and some trends go back to 1976.

Recording schemes (range of invertebrates) (BRC, CEH, JNCC, NBN, NERC, NSS)

At least 412 invertebrates listed as priority species under the UK Biodiversity Action Plan are recorded across the UK by 88 organisations.

Mammals:

National Bat Monitoring Programme (BCT, JNCC, NE)

Approximately 2,500 sites monitored. Long-term trends available for 11 of the UK's 17 bat species. Scheme started in 1996.

National Gamebag Census (GWCT, JNCC)

600 estates across GB return information on game and predator bags. Sixteen species of mammal recorded. JNCC funds analysis of the data. Scheme started in 1961.

Breeding Bird Survey/Waterways Breeding Bird Survey – Mammal Data (BTO, JNCC)

Mammal data collected at 2,400 Breeding Birds Survey sites since 1995, and 300 Wetland Breeding Bird Survey Sites since 1998.

Plants:

British Bryological Society Recording Schemes (BBS, CEH, JNCC, BRC, NERC)

The Vice-County Recording Scheme (established 1937), the Mapping Scheme (established 1960) and the Threatened Bryophyte Database scheme (established 2000) have collected data on 1,034 species of bryophyte across the UK.

Key: BBS – British Bryological Society, BC – Butterfly Conservation, BCT – Bat Conservation Trust, BRC – Biological Records Centre, BTO – British Trust for Ornithology, CCW – Countryside Council for Wales, CEH – Centre for Ecology and Hydrology, Defra – Department for Environment, Food and Rural Affairs, FC – Forestry Commission, GWCT – Game and Wildlife Conservation Trust, JNCC – Joint Nature Conservation Committee, NBN – National Biodiversity Network, NE – Natural England, NERC – Natural Environment Research Council, NIEA – Northern Ireland Environment Agency, NSS – National Schemes and Societies, NTS – National Trust for Scotland, RBBP – Rare Birds Breeding Panel, RSPB – Royal Society for the Protection of Birds, SG – Seabird Group, SGov – Scottish Government, SNH – Scottish Natural Heritage, SOTEAG – Shetland Oil Terminal Environmental Advisory Group, WWT – Wildfowl and Wetlands Trust

During the reporting year, data from surveillance schemes in the UK continued to be used for a variety of purposes. One example of how biodiversity surveillance and monitoring data support policy making is the BICCO-Net (Biodiversity Impacts of Climate Change Observation Network) project, which is managed by the British Trust for Ornithology, with JNCC chairing its steering group. Funded by Defra and with contributions from the Countryside Council for Wales and Scottish Natural Heritage, the project seeks to strengthen the evidence base for policy-making on climate change mitigation and adaptation. Data from the UK surveillance effort will be used to produce an analysis of how climate change influences biodiversity. The project is only possible due to the existence of the surveillance and monitoring output of the schemes in which JNCC and its partners invest.

In the marine environment we are substantially expanding our surveillance and monitoring activities

in response to obligations for the conservation of marine habitats and species that arise from the OSPAR Convention, and the EU Habitats and Marine Strategy Framework Directives. During the reporting year, JNCC worked to develop a strategy for surveillance and monitoring in the offshore marine environment and, in partnership with Natural England, for English inshore waters. This work will continue into 2009/10.

JNCC also played a lead role in the UK Marine Monitoring and Assessment Strategy process, with Jane Hawkridge chairing the Healthy and Biologically Diverse Seas Evidence Group. Our involvement means we are well placed to integrate this work with existing schemes.

Work was also carried out on a surveillance strategy for cetaceans, to meet Habitats Directive obligations. The draft strategy proposes full surveys once every decade supported by more limited monitoring during the intervening years.

**Bryophyte monitoring
Ben Dearg, West Ross,
Scotland**

Bryologist Gordon Rothero setting up a permanent snowbed vegetation monitoring transect below the summit of Ben Dearg, West Ross. This is a partnership project between Scottish Natural Heritage, Royal Botanic Garden Edinburgh, the British Bryological Society and University of Bergen.

© David Genney/SNH





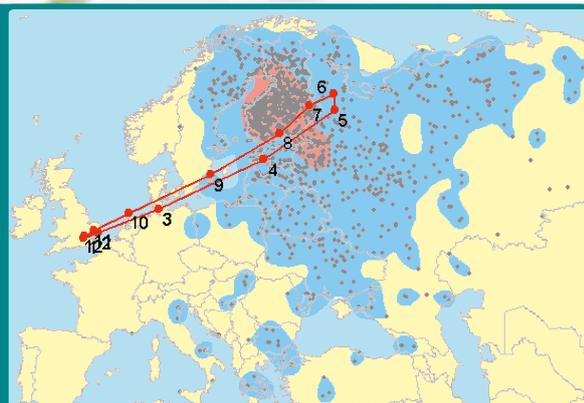
Teal *Anas crecca*

Inset: Map of migratory highways

Movements of teal between Great Britain and Ireland and the continent as revealed by reports of ringed birds. The numbered dots show the average position of the population in each month, the small dots represent individual birds and the shaded areas describe the area where 50% (pink) and 95% (blue) of the population is to be found.

The long-term nature of some of our surveillance datasets has particular value for our stakeholders when they face short-term needs for data and information. A key example arises from the need to manage responses to the spread of Highly Pathogenic Avian Influenza (HPAI). The National Ringing Scheme, which is a longstanding partnership between the British Trust for Ornithology (BTO) and JNCC, has been tracking bird movements since 1909.

Defra commissioned BTO to use the ringing dataset to assess the risk of the spread of HPAI to the UK by wild birds, one of a number of possible vectors for the disease.



BTO produced a migration mapping tool which is used to inform qualitative risk assessments, helping Defra to understand the likelihood of HPAI being introduced to the UK by wild birds when there is an outbreak elsewhere in Europe and also to understand if wild birds might have been a vector when HPAI is found in the UK.

Teals © John Harding/BTO

Map © BTO

10

Access to information



JNCC works to support nature conservation by co-ordinating the collection and collation of biological and geological data and making that information as accessible as possible to users

Large amounts of biodiversity data are recorded each year in the UK, much of it by volunteers. JNCC plays an important role in co-ordinating that resource and ensuring that it is recorded and stored in a usable form. We also work to make data available to support evidence-based policy-making.

During the reporting year, we continued to improve the way information is stored and to make it available to as wide a range of users as possible. JNCC's **Recorder** software has been developed to allow biological records that are collected in the field to be entered and collated in a standard digital form. The latest version, **Recorder 6**, allows users to collect and collate an unlimited number of records and includes a distribution mapping function. In the UK, **Recorder** is used by national societies, such as the British Dragonfly Society and the British Lichen Society, and Local Record Centres (LRCs). LRCs bring together information on flora and fauna in their locality and make it available to users. Volunteers who support the work of LRCs are often also suppliers of information to national recording schemes.

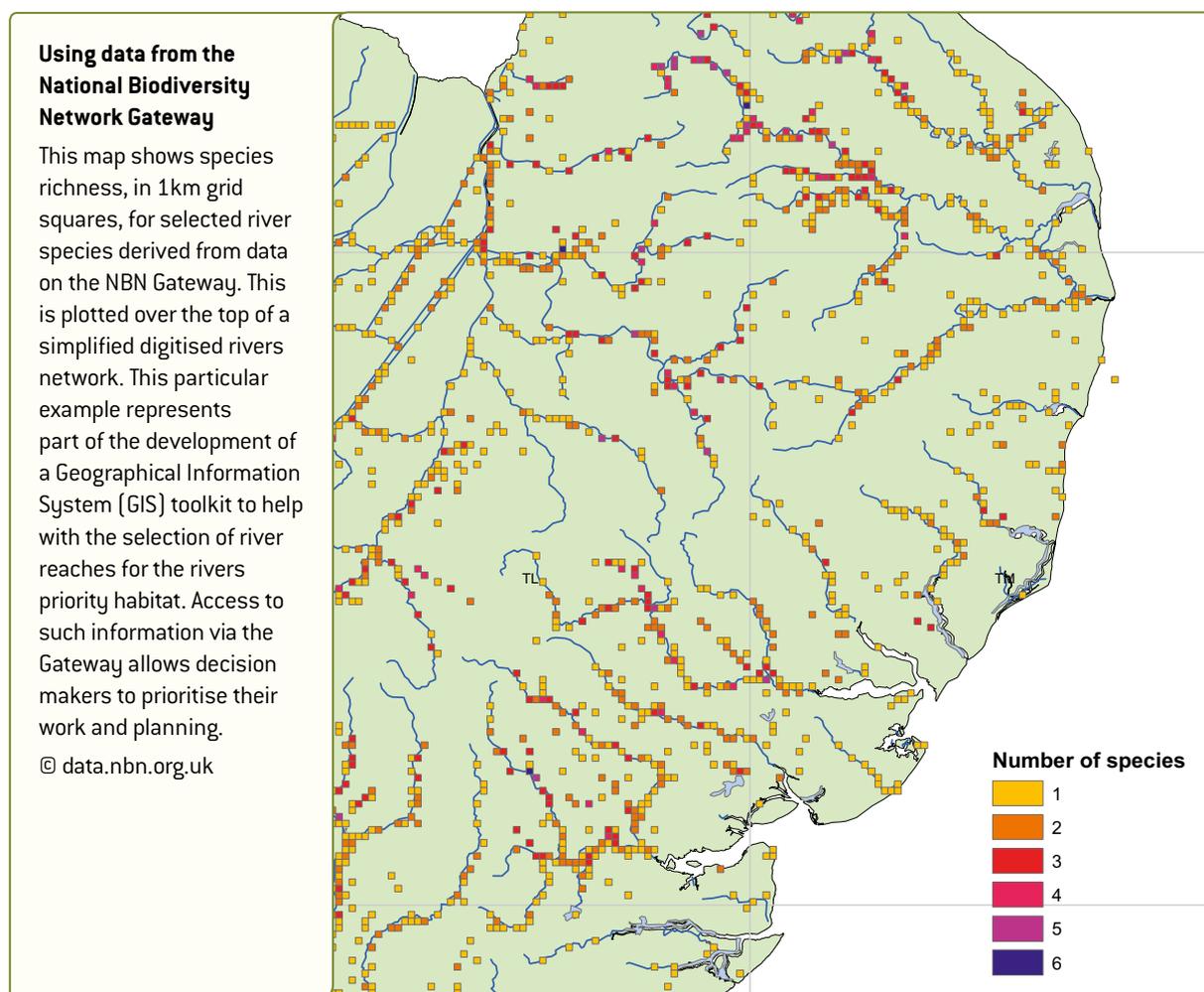
Our main focus for promoting **Recorder** during the reporting year was on the LRC network, and 60 per cent of the network's members are now using the software. The **Recorder 6** user group, recently established by JNCC, will examine options and priorities for the future development of the package.

As well as encouraging the flow of data, JNCC is also concerned with ensuring that data collected in the field have the accuracy necessary to support policy applications. During the reporting year we worked with Defra and Natural England to sketch out a new tool to determine data quality, which will be developed during the coming year with input from the LRCs and recording schemes.

Data collected by *Recorder* users feed into the National Biodiversity Network (NBN), a network of biodiversity databases. JNCC manages the NBN website data.nbn.org.uk, which holds species records in an accessible form. At the end of the reporting year, it held 35 million records and the

site was receiving 180,000 visits each month. Site users include Government agencies, other nature conservation organisations and members of the public. There has also been an increase in use of NBN data and functionality via other websites, which were responsible for 80,000 page views of NBN data each month by the end of the reporting year.

During the year we also continued to support the Marine Environmental Data and Information Network (MEDIN) through the development of its strategy. This initiative aims to ensure that those working in marine nature conservation have access to high-quality information through establishing a single on-line access point for information.



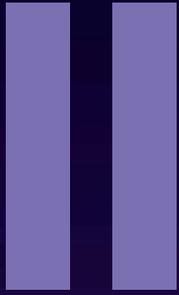


Surveying Binevenagh Special Area of Conservation
Northern Ireland Environment Agency field workers on Binevenagh SAC

Binevenagh is the only site representing the rare habitat 'Calcareous rocky slopes with chasmophytic vegetation' in Northern Ireland. The site comprises steeply-rising basalt cliffs with a range of chasmophytic (rock crevice) species. Of particular interest is the remnant arctic-alpine flora, in addition to plants that are more usually

associated with coastal locations. Species include mountain avens *Dryas octopetala*, moss campion *Silene acaulis*, purple saxifrage *Saxifraga oppositifolia*, thrift *Armeria maritima* and sea campion *Silene uniflora*. Notable bryophytes such as *Tortula princeps* also occur.

@ M Wright/NIEA



Policy-relevant information and reporting



JNCC aims to encourage research and provide information products that support the development and implementation of nature conservation policy

JNCC undertakes a range of activities in support of the UK Biodiversity Action Plan (UK BAP), including chairing the Biodiversity Reporting and Information Group (BRIG). Following the revision of the priority list of habitats and species under UK BAP undertaken in 2007/08, BRIG co-ordinated an exercise to identify the key actions needed to improve the conservation status of the hundreds of habitats and species on the priority list. This will assist future conservation action in support of these features. During this process it became clear that lack of knowledge was an important constraint to identifying appropriate actions for many species. To help improve our knowledge, JNCC organised a workshop with ecological consultancy Peak Ecology Ltd that brought together 30 UK species experts to identify 1,300 priority research and survey actions.

Improving the focus and direction of UK research effort so that it is better able to support biodiversity conservation is an important aspect of JNCC's work. JNCC provides the secretariat for a UK Biodiversity Partnership Standing Committee sub-group, the Biodiversity Research Advisory Group (BRAG), which brings together researchers, practitioners and policy-makers to promote scientific research that answers the needs of the UK BAP. During the reporting year BRAG continued to foster links with other research co-ordination groups, most notably by organising a special session on ecosystem services at the annual meeting of the British Ecological Society in September 2008. The session was attended by more than 75 ecologists, economists and policy-makers.

We also provide the secretariat for the Global Biodiversity Sub-Committee of the UK Global Environmental Change Committee, an inter-departmental committee that co-ordinates UK investment in the science and technology of global environmental change. Outputs during the year included a paper on emerging science issues, such as ground-level ozone and ocean acidification, for the ninth Conference of the Parties to the Convention on Biological Diversity.

JNCC is closely involved in ensuring that available biodiversity data are put to the best

possible use, and during the year we made significant progress toward streamlining reporting on progress towards the 2010 biodiversity target (see Chapter 1). The UK has obligations to report on achievements in the area of nature conservation under international agreements, such as the Convention on Biological Diversity, and under European law through the Habitats Directive.

As much of the reporting uses the same information, JNCC sees advantage in harmonising the processes wherever possible with a focus on biodiversity outcomes rather than actions.



Serotine bat
Eptesicus serotinus

The suite of biodiversity indicators that measure the UK's progress towards halting biodiversity loss were updated during the reporting year. First published by Defra in June 2007 as *Biodiversity Indicators in Your Pocket*, the project has since been updated online (www.jncc.gov.uk/biyp).

The indicators track changes in 18 very different aspects of biodiversity, such as spending on biodiversity, populations of key species, river quality and volunteer

conservation work. Trends are measured using a simple traffic light rating. The traffic lights assess change over time and judge whether or not the indicator is 'going in the right direction'. For example, the bat indicator uses data from JNCC-supported surveys. Its headline measure is a composite index based on population trends for six species – Daubenton's, noctule, serotine, lesser horseshoe, common pipistrelle and soprano pipistrelle.

© Hugh Clark/ Bat Conservation Trust

Indicators are being used increasingly as a means of summarising biodiversity information in a way that is relevant to policy. During the year, JNCC provided support to Defra on the update of *Biodiversity Indicators in Your Pocket*.

We also finalised the second report on the status of habitats and species of European importance that are listed on the annexes of the EU Habitats Directive. The report includes an assessment of the conservation status of all habitats and species listed by the Directive that occur in the UK. The report was completed by JNCC working in close collaboration with colleagues in the country conservation bodies, including the

habitat Lead Co-ordination Networks (see Chapter 6). In addition to the 167 habitats and species in the Atlantic biogeographic region the UK report also covered 14 habitats and species found in Gibraltar in the Mediterranean region.

The assessment set out in the report has revealed that considerable progress has been made in protecting some habitats and species since the Directive came into force in 1994, but that there are other habitats and species that require additional measures to ensure their long-term viability. Another key conclusion is that there are gaps in our knowledge in the form of data and understanding.



Green sea turtle
Chelonia mydas

Just over half of the species and habitats reported from Gibraltar and adjacent waters are in unfavourable conservation status. This is not a huge surprise given that species and habitats were listed on the Habitats Directive because they were recognised as being impacted by a range of problems. The results illustrate the task facing governments in improving the conservation status of species and habitats.

The green sea turtle *Chelonia mydas* was assessed by the UK as in 'unfavourable-inadequate' conservation status in the Mediterranean biogeographical region. This is as a result of threats from fishing, shipping and pollution. The biogeographic assessment for the region as a whole was 'unfavourable-bad' in the most recent reporting on conservation status under the Habitats Directive.

© Brandon Cole/naturepl.com



Fen raft spider *Dolomedes plantarius*
 Redgrave and Lopham Fen National Nature Reserve, Norfolk-Suffolk border

First recorded on the Norfolk-Suffolk border in 1956, the fen raft spider lives on the surface of pools and ditches where it ambushes other invertebrates and even small fish using its long, highly sensitive legs. Improved monitoring of invertebrates like the fen raft spider is one of the priorities that emerged from the workshop organised by JNCC during the reporting year to address

information gaps identified during the recent UK Biodiversity Action Plan Species and Habitat Review. The workshop brought together species experts to set priorities, many of which were in the areas of invertebrates, bryophytes, lichens and fungi – taxonomic groups that have not traditionally attracted funding.

© Helen Smith

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Governance and corporate services



This programme provides the 'back office' functions without which JNCC could not operate

The work of the Joint Committee, company Board and staff is supported by this programme. It provides professional management for corporate governance, finance, human resources, communications, information technology and office facilities to ensure that the organisation meets its legal obligations and corporate objectives. The programme continues to strive for efficiencies to ensure that JNCC's functions are delivered in the most cost-effective way possible.

One of the main achievements during the reporting year was the development of a new vision and strategy for JNCC, which were endorsed by the Joint Committee in March 2009 (see Introduction).

Much of the work of the Governance and Corporate Services programme involves assisting other programmes to achieve their targets. In this context, key developments include the following:

- we started to implement an external communications strategy that provides best practice for communications with stakeholders, and addresses the appropriate channels to use when engaging external audiences and methods to measure outcomes;
- we managed the production of a leaflet, brochure and series of display stands to support the launch of the inter-agency Land Use Policy Group's vision for the future of the EU Common Agricultural Policy in March 2009;
- JNCC held a seminar at the London Stock Exchange in January 2009 to publicise our 'global impacts' work (see Chapter 3) and, through the UK Nature and Landscape Office, hosted a reception during Green Week in June 2008 in Brussels (see Chapter 4);

- an upgrade was implemented to the Financial Management Information system to improve and simplify the procurement process for project managers. In-house training on finance and procurement was provided to staff across the organisation;
- 21 recruitment exercises were successfully completed, including the recruitment of two new directors;
- a new suite of software was provided to all staff. The new system raised IT skill levels across the organisation, through training that was provided to nearly all staff; and
- JNCC was an early adopter of video-conferencing technology, which has become a vital tool to the organisation given our global reach. During the year we continued to use video-conferencing to reduce travel costs and our carbon 'footprint', and savings of £28,000 and 32,000 tonnes of carbon were achieved.



Environmental management

JNCC's Senior Habitats Adviser Mark Crick taking part in our composting scheme

JNCC has continued to improve its environmental performance during the reporting year.

In June 2008 the head office in Peterborough was accredited with BS8555 Phase 3 for its Environmental Management System by National Quality Assurance auditors.

Greening the organisation is a team effort at JNCC with staff generating ideas and making a personal contribution to initiatives such as the composting scheme, which sees volunteers taking green waste home from the office to add to their own compost bins.

© Cathy Gardner/JNCC



Putting Inverdee on the map
New office naming ceremony, Aberdeen

A naming ceremony for the new office building that will be JNCC's base in Aberdeen was held in January 2009. Richard Lochhead, Scottish Cabinet Secretary for Rural Affairs and the Environment, christened the £12 million development 'Inverdee House'. The project is a joint scheme between the Scottish Environment Protection Agency (SEPA) and Grampian Housing. When the new

building is completed in 2010 it will provide local housing as well as offices and facilities for JNCC, SEPA and Scottish Natural Heritage (SNH).

Pictured with Mr Lochhead are (from right) JNCC Managing Director Deryck Steer, SEPA Chairman David Sigsworth and Sue Davies, from SNH.

© Murdoch Ferguson

Appendices

This section includes details of the Joint Committee and the JNCC support company during the financial year 2008/2009, audited accounts, including profit and loss statement, balance sheet, cashflow statement, remuneration report and statement on the system of internal control

Joint Committee and support company

The Joint Committee comprises 14 Members: a Chairman and five independent Members appointed by the Secretary of State; the Chairman of the Council for Nature Conservation and the Countryside; the Chairmen or Deputy Chairmen of the Countryside Council for Wales, Natural England and Scottish Natural Heritage; and one other Member from each of these bodies. The term of appointments for the Chairman and independent Members is initially for three years and Members may be considered for re-appointment for one further term.

Support is provided to the JNCC by a company limited by guarantee, JNCC Support Co, which was incorporated on 2 March 2005 (registration number 05380206). The company Board comprises Joint Committee Members and three executive directors.

The Committee has adopted the Guidance on Codes of Practice for Board Members of Public Bodies issued by the Cabinet Office, for the purposes of corporate governance.

A Register of Interests is maintained for Joint Committee Members and directors of JNCC Support Co which is published in the accounts.

JNCC offices

Headquarters

Joint Nature Conservation Committee,
Monkstone House, City Road, Peterborough, PE1 1JY
Tel: +44 (0)1733 562626 Fax: +44 (0)1733 555948
Web: www.jncc.gov.uk

Aberdeen office

Joint Nature Conservation Committee,
Dunnet House, 7 Thistle Place, Aberdeen, AB10 1UZ
Tel: +44 (0)1224 655704 Fax: +44 (0)1224 621488

Brussels office

UK Nature & Landscape Office,
Quai au Foin 55 / Hooikaai 55, B 1000 Bruxelles, Belgium
Tel: +32 (0) 27 38 74 80/81 Fax: +32 (0) 27 38 74 87

Senior JNCC staff 2008/2009

Managing Director	Mr Deryck Steer
Director of Science	Dr Malcolm Vincent (to 30 September 2008) Dr Andrew Stott (on secondment from Defra from 1 December 2008)
Director of Policy and Resources	Mr Marcus Yeo
Director of Marine	Dr John Goold (from 1 October 2008)

JNCC Support Co Information

Company number:	05380206 (England and Wales)
Directors:	Dr P Bridgewater (Chair) Mr PM Archdale (Appointed 1 March 2009) Mr P Casement Mr PA Christensen Mr DJ Crawley Dr JC Goold (Appointed 1 October 2008) Professor D Hill Dr IM Joyce Mr J Lloyd Jones OBE Mr DE Pritchard Mr D Steer Mr A Thin Professor MB Usher Professor LM Warren Judith Webb (Appointed 1 September 2008) Mr MJM Yeo Dr RA Brown (Resigned 17 February 2009) Professor P Doyle (Resigned 31 March 2009) Dr MA Vincent (Resigned 30 September 2008)
Secretary:	Mrs SE McQueen
Registered Office:	Monkstone House City Road Peterborough Cambridgeshire PE1 1JY
Auditors:	National Audit Office
Bankers:	Lloyds Bank Plc 30-31 Long Causeway Peterborough PE1 1YH

Audited accounts

Directors' report for the year ended 31 March 2009

JNCC Support Co – history and statutory background

The Joint Nature Conservation Committee (JNCC) is the statutory adviser to Government on UK and international nature conservation. Its work contributes to maintaining and enriching biological diversity, conserving geological features and sustaining natural systems.

JNCC delivers the UK and international responsibilities of the Council for Nature Conservation and the Countryside (CNCC), the Countryside Council for Wales (CCW), Natural England (NE), and Scottish Natural Heritage (SNH).

JNCC, originally established under the Environmental Protection Act 1990, was reconstituted by the Natural Environment and Rural Communities Act 2006.

The JNCC Support Co is a company limited by guarantee established in 2005 whose principal activity is the provision of support to the JNCC.

Funding

The total budget for JNCC is set each year by Ministers of the Department for Environment, Food and Rural Affairs after consultation and in agreement with their Scottish, Welsh and Northern Irish colleagues.

The budget comprises two parts: those 'reserved' matters funded by the Department for Environment, Food and Rural Affairs; and all other work funded through the Countryside Council for Wales, Natural England and Scottish Natural Heritage (the GB conservation bodies) and the Department of the Environment in Northern Ireland.

The Department for Environment, Food and Rural Affairs and devolved administrations ring-fence the relevant element of grant-in-aid to their respective funding bodies. Any grant-in-aid provided by a Department/administration for the year in question will be voted in the Department's/administration's Estimate and will be subject to Parliamentary control.

Funding from other sources, which is usually linked to specific projects, is detailed in the accounts.

Review of business

During 2008/09 the company made a significant contribution to nature conservation on both the national and international level via an extensive and varied programme of work. 34 of the company's 38 Key Performance Indicators have been fully or substantially met with details of key achievements and performance against specific targets being detailed in the company's annual report.

As a company working entirely within the public sector the company is required by HM Treasury not to build up sizable reserves and to budget to break-even year on year. For the year-ending 31 March 2009 the company made a small loss of £28,662 (profit of £21,697 in 2007/08), which reduced total reserves to £397,749 (£403,083 for 2007/08). The company continues to demonstrate a high level of control over the management of public monies for which it has stewardship responsibilities.

The company allocates resources against existing income streams. The board assesses the potential impact of financial and non-financial risk on a continuing basis, through the company's system of internal controls and an overview from the Audit and Risk Management Committee which is chaired by a non-executive director and reports to the board. The directors are not aware of any significant risk which may have an impact on the ability of the company to continue to operate at the current level of activity.

Future developments

The directors do not anticipate any significant changes in the turnover or the activities of the company. The principal strategic objectives of the company are changing slightly to reflect devolution and align the work of the JNCC with what it has identified as the major conservation issues it faces. The principal strategic objectives for 2009/10 are:

- contribute to the development of the UK, EU and global evidence base and identify future challenges to UK biodiversity and geodiversity by gathering intelligence and assessing risk and opportunity;
- provide advice and long-term thinking on solutions to biodiversity and geodiversity challenges, and engage in, commission and deliver initiatives to address these challenges:
 - a. outside territorial waters;
 - b. in the Overseas Territories and Crown Dependencies;
 - c. globally;
- act as an informed link between national, European and global decision-making and implementation bodies, and provide advice on policy and implementation and communicate best practice to stakeholders working across and at these scales.

Donations

There were no political and charitable donations in the year.

Personal data

There were no losses of personal data in 2008/09.

Sickness absence

The average number of days of sickness absence per full-time employee equated to 5.64 days (7.73 days in 2007/08).

Fixed assets

In 2008/09 the company spent £9,798 on improvements to leasehold premises (£6,629 in 2007/08), £65,422 on computer equipment (£10,224 in 2007/08) and £41,249 on software licences (£23,204 in 2007/08).

Payment of creditors

JNCC follows the principles of the Better Payment Practice Code, and the policy is to ensure that all payments are made by the due date. This policy is known throughout the organisation and there is a formal complaints procedure to enable suppliers' complaints to be dealt with quickly. 95% of invoices were paid within the due date in 2008/2009, an improvement of 3% on the previous year. The JNCC has also taken the steps necessary to meet, where possible, the Treasury's target of paying invoices within 10 days of receipt to assist suppliers in the current demanding economic climate.

Results and dividends

The company has no issued share capital and consequently the question of the payment of a dividend does not arise. Any surplus at the year-end is transferred to the following year and applied to meet the objectives of the company.

Directors' interests

As the company has no share capital, directors have no rights to subscribe for additional shares or debentures.

The articles of association do not require any of the directors to retire by rotation, however directors have to retire if they are no longer Members of the company or cease to be Members of the Executive Management Board. A Member will cease to be a Member of the company if they cease to be a Member of the Joint Committee.

Responsibilities of the directors

Company law requires the directors to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the company and of the profit and loss of the company for that period. In preparing those financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and maintained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 1985. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Where amounts are presented within items in the profit and loss account and balance sheet, the directors have had regard to the substance of the reported transactions or arrangement, in accordance with generally accepted accounting principles or practice. In the case of each of the persons who are directors at the time when the directors' report is approved:

- so far as the directors are aware, there is no relevant audit information (information needed by the company's auditors in connection with preparing the report) of which the company's auditors are unaware; and
- each director has taken all the steps that they ought to have taken as a director in order to make themselves aware of any relevant audit information and to establish that the company's auditors are aware of that information.

Auditors

Following the passing of The Government Resources and Accounts Act 2000 (Audit of Non-profit-making Companies) Order 2009 the Comptroller and Auditor General is empowered to audit the JNCC Support Co's financial statements and for 2008/09 and future years the auditors will be the National Audit Office.

On behalf of the Board.

Mr Deryck Steer

Managing Director
6 July 2009

Statement on internal control

1 Scope of responsibility

As Managing Director, I have responsibility for maintaining a sound system of internal control, for the JNCC and its Support Company that supports the achievement of the JNCC's policies, aims and objectives, whilst safeguarding the public funds and the assets for which I am personally responsible, in accordance with the statement of accounting responsibilities placed upon me by the Chief Executive of Natural England on her own behalf and that of the Accounting Officers of Scottish Natural Heritage, the Countryside Council for Wales and the Department of the Environment (Northern Ireland) in accordance with the responsibilities assigned to them in Managing Public Money.

The Joint Committee and company Board sets the strategy and programmes of work and monitors implementation respectively. Programmes, performance indicators and associated risks are agreed with Ministers following assessment by the JNCC Sponsors Group. This group comprises representatives from government departments, devolved administrations and the country conservation bodies. The JNCC Sponsors Group also monitors achievement of programmes.

2 The purpose of the system of internal control

The system of internal control is designed to manage risk to a reasonable level rather than to eliminate all risk of failure to achieve policies, aims and objectives; it can therefore only provide reasonable and not absolute assurance of effectiveness. The system of internal control is based on an ongoing process designed to identify and prioritise the risks to the achievement of the JNCC's policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically. The system of internal control has been in place in the JNCC for the year ended 31 March 2009 and up to the date of approval of the annual report and accounts, and accords with Treasury guidance.

3 Capacity to handle risk

3.1 Leadership

Responsibilities relate to me as analogous Accounting Officer. A risk management strategy is in place, which outlines how I and my Executive Management Board colleagues require the organisation to manage risk. The Executive Management Board is committed to embedding the principles of effective risk management into the culture of the organisation.

3.2 Embedding risk management

The risk management strategy entails embedding the risk management process into each part of the management, planning delivery and reporting process. All three Management Groups, as well as the Executive Management Board take a formal role in the risk management process and have responsibility for ensuring risk management processes remain effective and relevant to the organisation's needs. Programme Leaders are required to identify risks in their projects and programmes and attribute a rating in each of five specified areas. High risk/high cost projects are identified through the planning process and the Executive Directors have direct involvement in scrutinising project plans for these projects, ensuring they are satisfactory and are reviewed regularly with Programme Leaders. Staff are trained on how to identify risk through an annual risk workshop and an element of risk management is included in some corporate training courses.

4 The risk and control framework

4.1 Strategy

JNCC's risk management strategy has been drawn up and implemented in line with Treasury guidance. Key elements of the strategy include:

- maintenance of organisation-wide risk registers, comprising high-level corporate risks, high inherent risks and medium/low risks, that are comprehensively reviewed on an annual basis;
- assignment of risk owners to each risk (Members of the Executive Management Board for corporate risks, appropriate senior managers for high inherent and medium/low risks); and
- quarterly reports from managers on the steps they are taking to manage risks in their areas of responsibility, including reports on the effectiveness of controls in place to manage the risks, and progress reports on implementing future controls.

The JNCC takes a balanced approach to determining its risk appetite, by accepting that major risks affecting the organisation must be controlled, but that exposure to some risks is necessary to enable the effective delivery of its objectives. The risk register specifically addresses the risk of delays to decision-making and missed

opportunities through excessive caution. During 2008/09, some of the main risk priorities for the JNCC related to:

- a change in the functions, composition or resourcing arrangements of JNCC and/or company arising from statutory/political changes in the country agencies or sponsor bodies;
- mismatch between resources needed to implement JNCC's strategy over an appropriate timescale and funding provided by Government; and
- other Government bodies take on functions of national and international significance without agreement of Joint Committee.

4.2 Financial control

The JNCC's system of internal financial control is based on a framework of regular management information, administration procedures including the segregation of duties, and a system of delegation and accountability. In particular, it includes:

- an online, real-time Financial Management Information System;
- Financial Memorandum and Financial Regulations;
- comprehensive budgeting systems;
- regular reviews by the Executive Management Board of periodic and annual financial reports which indicate financial performance against the forecasts and Key Performance Indices; and
- anti-fraud and corruption policy.

4.3 Review of effectiveness

As Managing Director, I have responsibility for reviewing the effectiveness of the system of internal control. My review of the effectiveness of the system of internal control is informed by the work of the internal auditors and the executive directors within the JNCC Support Company, all of whom have responsibility for the development and maintenance of the internal control framework, and comments made by the external auditors in their management letter and other reports. I have been advised on the implications of the result of my review of the effectiveness of the system of internal control by the Company Board and the Audit and Risk Management Committee. A plan to address weaknesses and ensure continuous improvement of the system is in place.

5 Corporate governance

Control of the process for maintaining and reviewing the effectiveness of the system of internal control is exercised by the following:

5.1 The Joint Nature Conservation Committee

Members of the Joint Committee have overall responsibility for fulfilling its statutory functions and promoting the efficient and effective use of resources by the JNCC. The Joint Committee reviews annual reports from the Audit and Risk Management Committee on the JNCC's and company's control and risk management. The Joint Committee meets quarterly.

5.2 The Company Board

The Board has overall responsibility for discharging the Joint Committee's corporate and business plans and for maintaining an effective framework of corporate governance. This includes maintaining effective systems of risk management and audit, financial management and planning and monitoring. The Board meets quarterly.

5.3 The Audit and Risk Management Committee

The Audit and Risk Management Committee is a sub-committee of the Company Board and has an exclusively non-executive membership, with one external member. The Audit and Risk Management Committee is accountable to the Board and to the Joint Committee. Its role is to support the Board in their responsibilities for issues of risk, control and governance and associated issues. The Committee meets quarterly.

5.4 Executive Management Board

The Executive Management Board is a sub-committee of the Company Board. It comprises the Managing Director and three executive directors, and meets monthly. The Executive Management Board has responsibility for directing and managing the affairs of the company to deliver corporate and business plans within a framework of effective controls. The Executive Management Board has responsibility for managing, reviewing and assessing the corporate risks of the organisation.

Some revisions have been made to the governance structure and procedures in 2008/09 to ensure they are effective in supporting delivery of JNCC's new strategy and meeting other internal and external requirements.

5.5 Internal audit

Internal audit of the JNCC and JNCC Support Co is carried out by Deloitte & Touche Public Sector Internal Audit Limited. They submit regular reports in accordance with the requirements of Government Internal Audit Standards (GIAS). Internal audit activity is targeted at assessing the adequacy and effectiveness of the systems of internal control and governance in the areas reviewed. The areas for review are determined by reference to the levels of risk in the new risk register. Audit reports include the assurance levels for each system on the adequacy and effectiveness of the JNCC Support Company's system of internal control together with recommendations for improvement.

6 Strategy, planning and performance management

During 2008/09 the Joint Nature Conservation Committee (JNCC) reviewed its strategy and developed a new vision, mission and strategic objectives. These describe the specific contribution that JNCC can make to domestic and international nature conservation. Corporate and business plans seek to enable the JNCC to deliver its strategy. The vision, strategy and corporate plans are published on JNCC's website.

7 Data security

During 2008/09 JNCC reviewed its data and information security risks and the measures in place for their mitigation in accordance with the data handling review. These have been strengthened where necessary. JNCC has in place a framework of policies and procedures and technical controls for information security and staff have undergone training. During 2008/09 there were no known breaches of the security of confidential data.

8 Significant control issues

In 2008/09 the following significant control issue was identified:

Business continuity planning

A Business Continuity Plan (BCP) has been in place since 2004 and has been revised and updated. A recent audit identified two areas where further work was required:

- a Business Impact Analysis (BIA) of the JNCC should be completed in order to assess the potential impact of a major incident on the organisations key activities;
- deadlines should be set for testing the Plan.

A BIA was undertaken in May 2008, and a disaster recovery scenario was completed in the IT area in the same year. However, an annual plan exercise involving the building is yet to be devised, alongside a call out exercise to ensure key members of staff can be contacted in the event of an emergency. This work will be completed during 2009 and any issues that arise will be fed into a revised BCP.

Mr Deryck Steer

Managing Director
6 July 2009

JNCC Support Co Remuneration Report

Remuneration policy

The remuneration for the Chair and Independent Members is set centrally by Defra.

The remuneration of the Managing Director is reviewed regularly against the advice issued by the Review Body on Senior Salaries. Any proposed changes are then subject to the approval of Defra.

All pay awards for staff below Grade 5 (i.e. all staff except for the Managing Director) have to conform to the annual Civil Service Pay Guidance document issued by Treasury. This guidance document forms part of the pay remit process, and is intended to ensure that pay awards are affordable, offer value for money, and meet the needs of individual businesses. As part of this process the JNCC has to submit its recommended pay award to Defra, who have delegated authority to approve pay remits that conform to the Treasury guidance. Pay remits that do not conform to the guidance require Treasury approval.

The JNCC applies a number of reward principles which aim to:

- meet business needs of the organisation;
- be affordable for the organisation in the short and long-term;
- provide a pay structure which is sustainable in the longer-term;
- reward, retain and motivate staff;

- support equal pay;
- be fair and transparent;
- ensure that appropriately skilled and experienced staff can be recruited;
- recognise and reward good performance;
- offer comparable salary levels with other relative workforce groups.

Contracts of employment

Appointments are made in line with the Civil Service Commissioners Recruitment Code, which requires appointment to be on merit on the basis of fair and open competition but also includes the circumstances when appointments may otherwise be made.

Unless otherwise stated below, the directors and officials covered by this report hold appointments which are open-ended. Early termination, other than for misconduct would result in the individual receiving compensation as set out in the Civil Service Compensation Scheme.

Dr P Bridgewater was appointed on a three year contract commencing on 1 October 2007.

Prof P Doyle was re-appointed on a three year contract commencing on 1 April 2006.

Prof L Warren was appointed on a three year contract commencing on 1 April 2006.

Mr D Pritchard was appointed on a three year contract commencing on 1 December 2006.

Prof M Usher was appointed on a three year contract commencing on 1 December 2006.

Judith Webb was appointed on a three year contract commencing on 1 September 2008.

Further information about the work of the Civil Service Commissioners can be found at www.civilservicecommissioners.gov.uk

Salary and pension entitlements

The following sections provide details of the remuneration and pension interests of the most senior JNCC staff, and those of the Chair and independent Members of the Committee. Members sponsored by the country conservation bodies are remunerated directly by those bodies. JNCC is advised of the salaries of the Chair and independent Committee Members by the Department for Environment, Food and Rural Affairs.

Salary

'Salary' includes gross salary, performance pay or bonuses, and any allowance, such as London Weighting Allowances, to the extent that it is subject to UK taxation. This report is based on payments made by the JNCC Support Co and thus recorded in these accounts.

Benefits in kind

The monetary value of benefits in kind covers any benefits provided by the employer and treated by the Inland Revenue as a taxable emolument. At the present time no employees of the JNCC Support Co are in receipt of taxable benefits.

Civil Service Pensions

The Pension benefits for the Chair are provided broadly by analogy with the Civil Service Pension scheme. This is because the Chair cannot be pensioned in the same scheme as staff but may have access to similar types of benefits. The independent Members do not receive pension benefits.

Pension benefits for staff are provided through the Civil Service pension arrangements. Staff in post prior to 30 July 2007 may be in one of four defined benefit schemes; either a 'final salary' defined benefit scheme (**classic**, **premium** or **classic plus**); or a 'whole career' scheme (**nuvos**). These statutory arrangements are unfunded with the cost of benefits met by monies voted by Parliament each year. Pensions payable under **classic**, **premium**, **classic plus** and **nuvos** are increased annually in line with changes in the Retail Prices Index (RPI). Members joining on or after 1 October 2002 and before 30 July 2007 may opt for either the appropriate defined benefit arrangement or a good quality 'money purchase' stakeholder pension with a significant employer contribution (**partnership** pension account). New entrants joining on or after 30 July 2007 are eligible for membership of the **nuvos** arrangement or they can opt for a partnership pension account. **Nuvos** is an 'earned pension' arrangement in which members accrue pension benefits at a percentage rate of annual pensionable earnings throughout the period of scheme membership. The current rate is 2.3%. Earned pension benefits are initially increased annually in line with increases in the RPI and attract annual pension increase.

Employee contributions are set at the rate of 1.5% of pensionable earnings for **classic** and 3.5% for **premium, classic plus** and **nuvos**. Benefits in **classic** accrue at the rate of 1/80th of final pensionable earnings for each year of service. In addition, a lump sum equivalent to three years' pension is payable on retirement. For **premium**, benefits accrue at the rate of 1/60th of final pensionable earnings for each year of service. Unlike **classic**, there is no automatic lump sum. **Classic plus** is essentially a hybrid with benefits in respect of service before 1 October 2002 calculated broadly as per **classic** and benefits for service from October 2002 calculated as in **premium**. In **nuvos** a member builds up a pension based on his pensionable earnings during their period of scheme membership. At the end of the scheme year (31 March) the member's earned pension account is credited with 2.3% of their pensionable earnings in that scheme year and the accrued pension is uprated in line with RPI. In all cases members may opt to give up (commute) pension for lump sum up to the limits set by the Finance Act 2004.

The **partnership** pension account is a stakeholder pension arrangement. The employer makes a basic contribution of between 3% and 12.5% (depending on the age of the member) into a stakeholder pension product chosen by the employee from a panel of three providers. The employee does not have to contribute but where they do make contributions, the employer will match these up to a limit of 3% of pensionable salary (in addition to the employer's basic contribution). Employers also contribute a further 0.8% of pensionable salary to cover the cost of centrally-provided risk benefit cover (death in service and ill health retirement).

The accrued pension quoted is the pension the member is entitled to receive when they reach pension age, or immediately on ceasing to be an active member of the scheme if they are already at or over pension age. Pension age is 60 for members of **classic, premium** and **classic plus** and 65 for members of **nuvos**.

Further details about the Civil Service pension arrangements can be found at the website www.civilservice-pensions.gov.uk

Cash Equivalent Transfer Values

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. The figures include the value of any pension benefit in another scheme or arrangement which the individual has transferred to the Civil Service pension arrangements. They also include any additional pension benefit accrued to the member as a result of their purchasing additional pension benefits at their own cost. CETVs are calculated in accordance with the Occupational Pensions Schemes (Transfer Values) (Amendment) Regulations and do not take account of any actual or potential benefits resulting from Lifetime Allowance Tax which may be due when pension benefits are taken.

Real increase in CETV

This reflects the increase in CETV effectively funded by the employer. It does not include the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

Mr Deryck Steer
Managing Director
6 July 2009

JNCC Support Co – Remuneration (audited information)

	Salary 2008/09, including performance pay	Benefits in kind 2008/09 (rounded to nearest £100)	Salary 2007/08, including performance pay	Benefits in kind 2007/08 (rounded to nearest £100)	Total accrued pension age 60 at 31/03/09 and related lump sum	Real increase in pension and related lump sum at age 60	CETV at 31/03/09	CETV at 31/03/08	Real increase in CETV	Time commitment days per year
	£ 000s	£ 000s	£ 000s	£ 000s	£ 000s	£ 000s	£ 000s	£ 000s	£ 000s	
Council Members:										
Chair										
Dr P Bridgewater										
01.10.07 to 30.09.10	35–40	n/a	15–20	n/a	n/a	n/a	n/a	n/a	n/a	104
Independent Members										
Prof P Doyle										
01.04.03 to 31.03.09	5–10	n/a	5–10	n/a	n/a	n/a	n/a	n/a	n/a	30
Prof L Warren										
01.04.06 to 31.03.12	5–10	n/a	5–10	n/a	n/a	n/a	n/a	n/a	n/a	30
Mr D Pritchard										
07.12.06 to 30.11.09	5–10	n/a	5–10	n/a	n/a	n/a	n/a	n/a	n/a	30
Prof M Usher										
01.12.06 to 30.11.09	5–10	n/a	5–10	n/a	n/a	n/a	n/a	n/a	n/a	30
Judith Webb ⁽¹⁾										
01.09.08 to 31.08.11	5–10	n/a	0	n/a	n/a	n/a	n/a	n/a	n/a	30
Senior Staff:										
Managing Director										
Mr D Steer										
90–95	n/a	85–90	n/a	40–45 plus lump sum of 125–130	0–2.5 plus lump sum of 0–2.5	974	901 ⁽³⁾	0	n/a	
Other Directors										
Dr M Vincent ⁽²⁾										
retired 30.09.2008	25–30	n/a	55–60	n/a	25–30 plus lump sum of 85–90	0–2.5 plus lump sum of 0–2.5	672	649 ⁽³⁾	-2	n/a
Mr M Yeo										
50–55	n/a	45–50	n/a	15–20	0–2.5	190	167 ⁽³⁾	6	n/a	
Dr J Goold ⁽⁴⁾										
started 01.10.2008	25–30	n/a	n/a	n/a	0–5	0–2.5	5	0	4	n/a
Other Senior Staff										
Dr A Stott ⁽⁵⁾										
started 01.12.2008	15–20	n/a	n/a	n/a	15–20 plus lump sum of 35–40	0–2.5 plus lump sum of 0–(2.5)	290	276	2	n/a

⁽¹⁾ Judith Webb's salary expressed as a full year equivalent falls in the band 5–10.

⁽²⁾ Dr M Vincent's salary expressed as a full year equivalent falls in the band 55–60.

⁽³⁾ Due to certain factors being incorrect in last year's CETV calculator there may be a slight difference between the final period CETV for 2007/08 and the start of period CETV for 2008/09.

⁽⁴⁾ Dr J Goold's salary expressed as a full year equivalent falls in the band 50–55.

⁽⁵⁾ Dr A Stott is on secondment from Defra and his figures are based on his Defra salary. As an existing member of the pension scheme his pension figures reflect a full year's pensions contributions, whereas his salary figures reflect only the proportion of salary paid during his period in post at JNCC Support Co. The secondment charge to JNCC attracts VAT and the actual cost charged to the profit and loss account was £19,563.42. Dr Stott's salary expressed as a full year equivalent falls in the band 50–55.

The certificate and report of the comptroller and auditor general to the Members of the Joint Nature Conservation Committee Support Co

I certify that I have audited the financial statements of the Joint Nature Conservation Committee Support Co for the year ended 31 March 2009 under the Government Resources and Accounts Act 2000. These comprise the Profit and Loss Account, the Balance Sheet, the Cash Flow Statement and Statement of Total Recognised Gains and Losses and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

Respective responsibilities of the Directors and auditor

The Directors are responsible for preparing the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice) and for ensuring the regularity of financial transactions. These responsibilities are set out in the Statement of Directors' Responsibilities.

My responsibility is to audit the financial statements in accordance with relevant legal and regulatory requirements, and with International Standards on Auditing (UK and Ireland).

I report to you my opinion as to whether the financial statements give a true and fair view and are properly prepared in accordance with the Companies Act 1985. I report to you whether, in my opinion, the information given in the Directors' Report is consistent with the financial statements. I also report whether in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

In addition, I report to you if, in my opinion, the Joint Nature Conservation Committee Support Co has not kept proper accounting records, if I have not received all the information and explanations I require for my audit, or if information specified by law regarding Directors' remuneration and other transactions is not disclosed.

I read the Directors' Report and consider the implications for my opinion if I become aware of any apparent misstatements within it.

Basis of audit opinions

I conducted my audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. My audit includes examination, on a test basis, of evidence relevant to the amounts, disclosures and regularity of financial transactions included in the financial statements. It also includes an assessment of the significant estimates and judgments made by the directors in the preparation of the financial statements, and of whether the accounting policies are appropriate to the company's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations which I considered necessary in order to provide me with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or other irregularity or error, and that in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements.

Opinions

In my opinion:

- the financial statements give a true and fair view, in accordance with United Kingdom Generally Accepted Accounting Practice, of the state of the company's affairs as at 31 March 2009 and of its deficit for the year then ended;
- the financial statements have been properly prepared in accordance with the Companies Act 1985 and the part of the remuneration report to be audited has been properly prepared in accordance with the Government Financial Reporting Manual; and
- the information given in the Directors' Report is consistent with the financial statements.

Opinion on Regularity

In my opinion, in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

Report

I have no observations to make on these financial statements.

Amyas CE Morse
Comptroller and Auditor General
National Audit Office
151 Buckingham Palace Road
Victoria
London
SW1W 9SS

7 July 2009

JNCC financial statements

Profit and Loss account for the year ended 31 March 2009

	Note	2008/09 £	2007/08 £
Turnover		9,127,023	9,540,146
Cost of sales		(7,427,643)	(7,820,415)
Gross profit		1,699,380	1,719,731
Administrative expenses		(1,847,262)	(1,821,357)
Operating loss	2	(147,882)	(101,626)
Transfer from Government Grant reserve		101,214	98,153
Loss on ordinary activities before interest		(46,668)	(3,473)
Other interest receivable & similar income		18,006	25,173
Interest payable	5	0	(3)
Profit/(loss) on ordinary activities before taxation		(28,662)	21,697
Tax on profit on ordinary activities		0	0
Profit/(loss) for the year		(28,662)	21,697

The company has made no acquisitions nor discontinued any operations within the meaning of Financial Reporting Standard 3 during 2008/09 therefore turnover and operating profit derive entirely from continued operations.

The accounting policies and notes on pages 71 to 77 form part of these financial statements.

Statement of Total Recognised Gains and Losses for the Year Ended 31 March 2009

	2008/09 £	2007/08 £
Profit/(loss) for the financial year	(28,662)	21,697
Capital grant for the purchase of assets	116,469	40,057
Gain/(loss) on the revaluation of assets	8,074	9,360
Transfer from the Government grant reserve	(101,214)	(98,153)
Total gains and losses relating to and recognised in the year	(5,333)	(27,039)

Note of Historical Profits and Losses for the Year Ended 31 March 2009

	2008/09	2007/08
	£	£
Profit/(loss) on ordinary activities before taxation	(28,662)	21,697
Difference – historical and actual depreciation	50,743	22,289
Difference – historical and actual amortisation	1,505	(6,094)
Historical cost profit/(loss) on ordinary activities before taxation	23,586	37,892
Historical cost profit/(loss) for the year retained after taxation and dividends	23,586	37,892

Balance Sheet as at 31 March 2009

	Note	2008/09	2008/09	2007/08	2007/08
		£	£	£	£
Fixed assets					
Intangible assets	6	101,270		84,498	
Tangible assets	7	255,519		249,761	
		356,789		334,259	
Current assets					
Stocks	8	55,775		61,539	
Debtors	9	298,345		945,480	
Cash at bank and in hand		635,624		272,015	
		989,744		1,279,034	
Creditors					
Amounts falling due within one year	10	(876,643)		(1,148,036)	
Net current assets		113,101		130,998	
Total assets less current liabilities		469,890		465,257	
Provisions for liabilities	11	(72,141)		(62,174)	
Net assets		397,749		403,083	
Capital and reserves					
Government grant reserve	12	357,588		334,259	
Profit and loss account	13	40,161		68,824	
Total reserves		397,749		403,083	

Approved by the Board of Directors on 22 June 2009 and signed on its behalf.

Mr Deryck Steer
Managing Director

Cashflow Statement for the Year Ended 31 March 2009

	Note	2008/09	2007/08
		£	£
Net cash (outflow)/inflow from operating activities	14	229,134	(228,737)
Capital expenditure		116,469	40,057
Returns from investments and servicing of finance	15	18,006	25,170
Increase/(Decrease) in cash		363,609	(163,510)

The accounting policies and notes on pages 71–77 form part of these financial statements.

Notes to the financial statements

1 Accounting policies

Basis of accounting

The financial statements are intended, without limiting the information given, to conform with the requirements of the Companies Act 1985 and 1989 and the Statements of Standard Accounting Practice and Financial Reporting Standards issued or approved by the Accounting Standards Board insofar as these requirements are appropriate. In certain instances information beyond these requirements has been presented utilising guidance provided by the 2008/09 Government Financial Reporting Manual [FRM].

These financial statements have been prepared under the historical cost convention, modified to account for the revaluation of fixed assets. Revaluations are taken to a government grant reserve.

Turnover

The principal form of income is grant-in-aid received from Defra, the GB Conservation Bodies and the Department of the Environment in Northern Ireland. This is treated as income in the accounts as it is provided to enable the JNCC Support Co to provide the services necessary to support the Joint Nature Conservation Committee in the delivery of its objectives.

The bulk of remaining turnover is in the form of contributions to project work, plus further income comprising Grants from European Union sources, income for the provision of advice, royalties and amounts generated by sales of publications.

Turnover is stated net of VAT and trade discounts.

Going concern

Grant-in-aid for 2009/10, taking into account the amounts required for JNCC Support Co's liabilities falling due in that year, has already been approved by Parliament, the Scottish Parliament and the Welsh Assembly. It is therefore considered appropriate that these financial statements have been prepared on a going concern basis.

Depreciation of fixed assets

Depreciation is provided on all tangible and intangible fixed assets at rates calculated to write off the cost or valuation of each asset evenly over its expected useful life as follows:

Leasehold premises	over the period of individual leases
Computer equipment	5 years
Other equipment	5 to 10 years
Software licences	5 years

Depreciation is charged on a monthly basis from the date of purchase.

Tangible and intangible assets have been valued at depreciated historical cost and, where material, values are updated annually using Price Index Numbers for Current Cost Accounting published by the Office for National Statistics.

Fixed assets costing less than £2,000 are charged to the profit and loss account in the year of purchase.

Stocks

Stocks are valued at the lower of cost and net realisable value. The stock valuation is adjusted for obsolete stock via a write down of stock where current sales indicate specific stock items are unlikely to generate future income flows.

Research and development

The company writes off all expenditure on research and development in the year it occurs.

Foreign exchange

Assets and liabilities in foreign currencies are translated into sterling at the rates of exchange ruling at the balance sheet date. Transactions in foreign currencies are translated into sterling at the rate ruling at the date of the transaction. Exchange differences are recognised in the profit and loss account.

Financial instruments

Trade debtors

Trade debtors do not carry any interest and are recognised and carried at the lower of their original invoiced value or recoverable amount. Provision is made when there is objective evidence that the asset is impaired. Balances are written off to the profit and loss account when the probability of recovery is assessed as being remote, or the cost of recovery is considered uneconomic.

Trade creditors

Trade creditors are not interest bearing and are stated at their nominal value.

Leasing

Rental costs arising in respect of operating leases are charged to the profit and loss account over the life of each lease.

Pension costs

Pension benefits are provided through the Principal Civil Service Pension Scheme (PCSPS), a defined benefit scheme, further details of which can be found in the Remuneration Report. The current rate of the employer contributions is based on the employee's Full Time Equivalent salary according to the bands listed below.

Band 1	£19,500 and under	17.1%
Band 2	£19,501 to £40,500	19.5%
Band 3	£40,501 to £69,000	23.2%
Band 4	£69,001 and over	25.5%

The Chair is entitled to a pension scheme but is prohibited from joining the Principal Civil Service Pension Scheme (PCSPS). An individual scheme has been set up described as "by analogy to the PCSPS". Any ongoing liability arising from this arrangement will be borne by JNCC Support Co. The cost of the by analogy pension scheme is not deemed to be material and the cost of the pension will be charged to the profit and loss account in the years that it is paid.

Grants received

Grant-in-aid received for capital expenditure is credited to a government grant reserve and is released to revenue over the useful expected life of the relevant asset. Grant-in-aid received to support revenue expenditure is credited to income in the profit and loss account for the year to which it relates. Grants received outside of grant-in-aid, including from European Union sources, are matched to the corresponding project expenditure in the year in which it is incurred.

Notional costs

The financing structure of the company does not include specific interest bearing debt, but to ensure that the profit and loss account bears an appropriate charge for the use of capital in the annual financial statements, a notional interest charge is added. In accordance with Treasury guidance, the calculation is based on a 3.5% cost of capital on average net assets.

Taxation

JNCC Support Co is not trading with a view to profit and is currently seeking clarification with HM Revenue and Customs to confirm that it has no liability to Corporation Tax. Notwithstanding this, any liability arising would be limited to that due on the receipt of bank interest payable, the tax liability upon which has been estimated at a maximum of £16,000 for the period April 2005 to April 2009, an amount considered to be below the level of materiality applied to these accounts.

The company is registered for VAT and completes returns on a quarterly basis.

2 Operating loss

	2008/09	2007/08
	£	£
This is stated after charging		
Total directors' emoluments	331,168	320,895
Auditors' remuneration	12,000	28,967
Depreciation and amortisation of owned assets	101,214	98,153
Pension costs	717,080	695,232
Operating lease rentals – land & buildings	252,101	277,040

3 Directors' emoluments

	2008/09	2007/08
	£	£
Directors' emoluments	283,955	274,610
Company contributions to defined benefit schemes in relation to directors' pensions	47,213	46,285

Four directors accrued retirement benefits in respect of qualifying service for the defined benefit scheme during the year.

The above details include the following amounts in respect of the highest paid director:

	2008/09	2007/08
	£	£
Highest paid director's emoluments	93,820	89,881
Company contributions to defined benefit schemes in relation to the highest paid director's pension	22,609	22,111

At 31 March 2009 the highest paid director had accrued a pension of £43,843 with a related lump sum of £128,358.

In addition to the directors' emoluments, a charge of £19,563 was made to the profit and loss account for 2008/09 in respect of consideration payable to Defra for the secondment of Dr Andrew Stott.

4 Staff costs

The average number of persons employed by the company, including directors, during the year was as follows:

	2008/09	2007/08
	No	No
Executive directors	4	3
Chairman and non-executive directors	5	5
Management	11	13
Operational	82	80
Administration	29	29
IT	3	3
	134	133

The aggregate payroll costs of these persons were as follows:

	2008/09	2007/08
	£	£
Wages and salaries	3,756,748	3,618,979
Social security costs	283,210	276,370
Other pension costs	717,080	695,232
	4,757,038	4,590,581

5 Interest payable

	2008/09	2007/08
	£	£
Interest payable – bank loans and overdraft and other loans repayable within five years	0	3

6 Intangible fixed assets

	Software licences
Cost	£
At 1 April 2008	163,757
Additions during year	41,249
Revaluations	8,032
At 31 March 2009	213,038
Amortisation	£
At 1 April 2008	79,259
Charge for the year	31,003
Depreciation on revaluations	1,506
At 31 March 2009	111,768
Net Book Value	£
At 31 March 2009	101,270
At 31 March 2008	84,498

Intangible assets represent the value of the software licences held. These are valued using current cost accounting where any fall in value has been treated as a permanent diminution in value.

Historical cost note

At 31 March 2009	£
Historic cost	252,468
Accumulated historic depreciation	(150,169)
Historic net book value	102,299
Cumulative provision for impairment at 31 March 2009	£
At 31 March 2009	42,075
At 31 March 2008	42,075

7 Tangible fixed assets

	Land and buildings	Computer equipment	Other equipment	Total
Cost:	£	£	£	£
At 1 April 2008	423,946	185,745	282,663	892,354
Additions during year	9,798	65,422	0	75,220
Disposals	0	(84,638)	(43,595)	(128,233)
Revaluation	0	45,932	6,340	52,272
At 31 March 2009	433,744	212,461	245,408	891,613

Depreciation

At 1 April 2008	320,880	126,830	194,883	642,593
Charge for the year	17,122	24,840	28,250	70,212
Depreciation on disposals	0	(84,617)	(42,838)	(127,455)
Depreciation on revaluation	0	45,394	5,350	50,744
At 31 March 2009	338,002	112,447	185,645	636,094

Net Book Value

At 31 March 2009	95,742	100,014	59,763	255,519
At 31 March 2008	103,066	58,915	87,780	249,761

Historical cost note

At 31 March 2009	£	£	£	£
Historic cost	334,353	323,060	216,904	874,317
Accumulated historic depreciation	(267,157)	(217,642)	(163,507)	(648,306)
Historic net book value	67,196	105,418	53,397	226,011

Cumulative provision for impairment at 31 March 2009

	£	£	£	£
At 31 March 2009	0	(12,012)	(3,719)	(15,731)
At 31 March 2008	0	(12,012)	(3,719)	(15,731)

8 Stocks

	2008/09	2007/08
	£	£
Finished goods	55,775	61,539

9 Debtors

	2008/09	2007/08
	£	£
Due within one year:		
Trade debtors	142,662	811,626
Other debtors	13,140	12,010
Prepayments	142,543	121,844
	298,345	945,480

10 Creditors – amounts falling due within one year

	2008/09	2007/08 (restated)
	£	£
Due within one year:		
Trade creditors	301,807	639,582
Other creditors	70,564	104,268
Other taxes and social security	115,668	101,813
Accruals and deferred income	388,604	302,373
	876,643	1,148,036

Other creditors for 2007/08 has been restated to reflect the amount now shown in note 11 under the heading "Other provisions" relating to refurbishment of the lifts.

11 Provisions for liabilities

	Pensions and similar obligations	Other provisions	Total Provisions	Pensions and similar obligations	Other provisions	Total Provisions
	2008/09	2008/09	2008/09	2007/08	2007/08	2007/08
	£	£	£	£	£	£
Balance at 1 April	(674)	(61,500)	(62,174)	(3,192)	0	(3,192)
Provision for year	(1,367)	(8,600)	(9,967)	(674)	(61,500)	(62,174)
Utilised in the profit and loss account	0	0	0	3,192	0	3,192
Balance at 31 March	(2,041)	(70,100)	(72,141)	(674)	(61,500)	(62,174)

The pension provision brought forward represents future liabilities under a separate pension scheme described as "by analogy to the main scheme" which was set up by Defra for Dr P Bridgewater, Chair of JNCC.

Other provisions brought forward relate to costs associated with the refurbishment of the lifts in Monkstone House which were classified under other creditors in the accounts for 2007/08. The increased provision for 2008/09 relates to service charge arrears for Monkstone House arising following a change in Managing Agent for the property. This cost has been provided for rather than accrued as the amount is under negotiation.

12 Government grant reserve

	2008/09
	£
Balance at 1 April 2008	334,259
Capital grant received in the period	116,469
Gain/(loss) on revaluation of assets	8,074
Depreciation for the year	(101,214)
Balance at 31 March 2009	357,588

13 Profit and loss account

	2008/09
	£
Transferred from JNCC at 1 April 2005	138,428
Movement between 1 April 2005 to 31 March 2008	(69,604)
Balance at 1 April 2008	68,824
Loss for the year	(28,662)
Balance at 31 March 2009	40,161

In the accounts for 2007/08 the balance transferred from JNCC was shown as a separate reserve. This has been combined with the profit and loss reserve in the balance sheet for 2008/09.

The above note contains an apparent miscasting of the balance at 31 March 2009. This is an unavoidable consequence of the rounding of the figures.

14 Reconciliation of operating (loss) to net cash inflow/(outflow) from operating activities

	2008/09	2007/08
	£	£
Operating loss	(147,882)	(101,626)
Depreciation charges	70,212	71,906
Amortisation	31,003	26,247
Transfer from Government Grant Reserve re capital expenditure	(116,469)	(40,057)
(Profit)/loss of disposal of assets	797	0
Decrease in stocks	5,764	16,787
Decrease in debtors	647,135	118,703
(Decrease) in creditors	(271,393)	(379,679)
Increase in provisions	9,967	58,982
Net cash flow from operating activities	229,134	(228,737)

15 Gross cash flows

	2008/09	2007/08
	£	£
Returns on investments and servicing of finance		
Interest received	18,006	25,173
Interest paid	0	(3)
	18,006	25,170
Capital expenditure		
Payments to acquire tangible fixed assets	(75,220)	(16,853)
Payments to acquire intangible fixed assets	(41,249)	(23,204)
Capital grant in aid received	116,469	40,057
	0	0

16 Reconciliation of net cash flow to movement in net debt

	2008/09	2007/08
	£	£
Increase/(Decrease) in cash in the year	363,609	(163,510)
Change in net funds resulting from cash flows	363,609	(163,510)
	363,609	(163,510)
Net funds at 1 April 2008	272,015	435,525
Net funds at 31 March 2009	635,624	272,015

17 Analysis of net fund

	Opening balance	Cash flows	Closing balance
	£	£	£
Net cash			
Cash at bank	271,365	364,104	635,469
Cash in hand	650	(495)	155
Net fund	272,015	363,609	635,624

18 Leasing commitments

	Land and buildings	Land and buildings
	2008/09	2007/08
	£	£
Operating leases which expire:		
Within one year	0	0
Within 2 to 5 years	236,313	236,313
Net fund	236,313	236,313

19 Pension costs

The pension cost charge in the profit and loss account represents contributions payable by the company to the PCSPS fund and amounted to £717,080 (2007/08: £695,232).

20 Legal Status

The Company is limited by guarantee. In the event of a liquidation, the liability of each member does not exceed £1 if they are a member at the date of the liquidation, or if they cease to be a member within one year of the date of the liquidation.

21 Contingent liability

There are no contingent liabilities to be declared for the current year.

22 Ultimate controlling party

14 of the 17 current directors are Members of the Joint Nature Conservation Committee which administers the grant-in-aid funding from the four country nature conservation agencies and directs the nature of the Company's activities for the benefit of the country agencies. For these reasons the directors consider the Joint Nature Conservation Committee to be the ultimate controlling party.

23 Related party transactions

The company receives its grant-in-aid funding from Natural England, Scottish Natural Heritage, the Countryside Council for Wales, (the GB conservation bodies), the Department of the Environment in Northern Ireland and the Department of Environment, Food and Rural Affairs (Defra). The GB conservation bodies are regarded as Non-Departmental Public Bodies respectively sponsored by Defra, the Scottish

Government and the Welsh Assembly Government. The GB conservation bodies, the Department of the Environment in Northern Ireland and Defra are considered to be related parties. During the year the company has carried out a number of material transactions with these bodies in the normal course of business. The quantum of the transactions between the company and these bodies was as follows:

	Grant-in-aid		Specific project funding		Services purchased by the company	
	2008/09	2007/08	2008/09	2007/08	2008/09	2007/08
	£	£	£	£	£	£
Natural England	2,834,870	2,952,000	211,344	229,017	72,540	92,631
Defra	1,891,221	1,920,000	611,903	359,594	35,884	0
Scottish Natural Heritage	1,669,591	1,738,000	26,000	105,532	103,451	100,393
The Countryside Council for Wales	834,302	869,000	0	51,503	21,853	30,809
Department of the Environment Northern Ireland	416,658	434,000	74,053	10,000	0	0

The net revenue expenditure incurred by the Joint Nature Conservation Committee on behalf of the GB conservation bodies and the Department of the Environment Northern Ireland during the year was as follows:

	2008/09	2007/08
	£	£
Natural England	3,439,000	3,598,000
Defra	2,294,000	2,117,000
Scottish Natural Heritage	2,025,000	2,339,000
The Countryside Council for Wales	1,012,000	1,059,000
Department of the Environment Northern Ireland	505,000	529,000

Related party transactions

Individual staff/Council Member	Corporate related body	Paid by JNCC		Paid to JNCC	
		2008/09	2007/08	2008/09	2007/08
		£	£	£	£
Mr D Steer	National Biodiversity Network Trust (Trustee & Treasurer)	75,000	74,000	(86,735)	(78,955)
Prof L Warren	British Geological Survey (NERC)	365,152	413,279	0	(509)

The above information relates to contracts in excess of £25,000. Any contract for a lesser sum is not considered to be material in the context of these financial statements.

The directors consider a financial interest to be the ability to influence the company in placing a contract with a party with whom they have a position of influence, or the ability to influence the performance of that contract by the contractor.

24 Intra-government balances

	Debtors: amounts falling due within one year	Debtors: amounts falling due after more than one year	Creditors: amounts falling due within one year	Creditors: amounts falling due after more than one year
	£	£	£	£
Balances with other central government bodies at 31 March 2009	85,217	0	3,156	0
Totals as at 31 March 2008	318,078	0	87,787	0

There were no balances outstanding with local authorities, public corporations and trading funds or NHS trusts in 2008/09 or 2007/08.

Board Members' interests

The following is a summary of Board Members' Interests for 2008/09:

Mr Peter Archdale (Board Member and Joint Committee Member appointed as a member of the Council for Nature Conservation and the Countryside by the Department of the Environment Northern Ireland)

Appointed from 1 March 2009

- Trustee, Ulster Wildlife Trust
- Trustee, Camphill Communities (NI)
- Director, Belfast Tall Ships 2008
- Member, Advisory Forum, Loughs Agency
- Community Representative, Western Health Trust
- Deputy Chairman, Council for Nature Conservation and the Countryside
- PM and C Archdale – Farm Business Partnership

Dr Peter Bridgewater (Board Chair and Joint Committee Chair appointed by the Secretary of State)

- Director, Global Garden Consulting
- Linnaean Society of London (Fellow)
- Institute of Ecology and Environmental Management (Fellow)
- Chartered Environmentalist, Institute of Environmental Management and Assessment

Dr Robert Brown (Board Member and Joint Committee Member appointed as a Member of the Council for Nature Conservation and the Countryside by the Department of the Environment Northern Ireland)

Appointed to 17 February 2009

- Council Member, Council for Nature Conservation and the Countryside
- Employed by the Department of the Environment Northern Ireland as Chairman of the Northern Ireland Biodiversity Group
- Self-employed in media/broadcasting work, giving talks/lectures, wildlife guiding at home and abroad, and occasional consultancy work
- Member, British Trust for Ornithology, National Trust, Ulster Wildlife Trust, Butterfly Conservation, Marine Conservation Society, Lecale Historical Society

Mr Patrick Casement (Board Member and Joint Committee Member appointed as Chairman of the Council for Nature Conservation and the Countryside)

- Self-employed farmer
- Chair, Council for Nature Conservation and the Countryside
- Member of the Board of Trustees of the National Trust
- Chairman of the National Trust Committee for Northern Ireland
- Member of Council of the National Trust (appointed by the Secretary of State for Northern Ireland)
- Member, National Trust, Ulster Wildlife Trust, British Trust for Ornithology, Butterfly Conservation, Woodland Trust

Mr Poul Christensen (Board Member and Joint Committee Member appointed by Natural England)

- Acting Chair, Natural England
- Board Member, South East England Development Agency
- Board Member, Agricultural Central Trading
- Management Board Member, Defra
- Self-employed farmer, Kingston Hill Farm
- Member, National Trust

Mr David Crawley (Board Member and Joint Committee Member appointed by Scottish Natural Heritage)

- Non-executive Director, the Wales Office
- Board Member, Scottish Natural Heritage
- Commissioner, Queen Victoria School, Dunblane
- Director and Chair, Central Scotland Forest Trust
- Chair, Mixed Stock Salmon Fisheries Working Group
- Member, National Trust, National Trust for Scotland

Professor Peter Doyle (Board Member and Joint Committee Member appointed by the Secretary of State)

Appointed to 31 March 2009

Self-employed:

- Geologist consultant, contracted to HM Revenue & Customs for aggregates work
- Editor for Blackwells Ltd, Oxford, editing 'Geology Today' magazine
- Freelance TV consultant, working on geological projects
- Education consultant, working for University of Greenwich and London South Bank University
- Author of books and articles
- Chairman, Geoconservation Commission, Geological Society of London
- Chair, Greater London Regionally Important Geological/geomorphological Sites Group
- Pew Marine Conservation Fellow, Pew Institute for Ocean Science

Dr John Goold (Director of Marine)

Appointed from 1 October 2008

None listed.

Professor David Hill (Board Member and Joint Committee Member appointed by Natural England)

- Non-executive Board Member, Natural England
- Chief Executive, David Hill Ecology & Environment
- Chairman, Environment Bank
- Director, Yorkshire Dales Rivers Trust
- Member, British Trust for Ornithology, National Trust, Royal Society for the Protection of Birds

Dr Ieuan Joyce (Board Member and Joint Committee Member appointed by the Countryside Council for Wales)

- Council Member, Countryside Council for Wales
- Self-employed farmer
- 70 acres of agricultural land subject to Tir Cynnal agri-environment agreement with Welsh Assembly Government

Mr John Lloyd Jones (Board Member and Joint Committee Member appointed by the Countryside Council for Wales)

- Chair, Countryside Council for Wales
- Director, Cambrian Mountains Initiative
- Member, Rural Economy and Land Use Strategic Advisory Committee, Rural Economy and Land Use programme
- Member, National Trust Estates Panel and National Trust Council
- Member, Woodland Strategy Advisory Panel for Wales
- Lay representative, Disciplinary Hearings Council for the Inns of Court
- Self-employed farmer
- Hendy Farm in Tir Gofal Scheme
- Member, National Farmers Union, Royal Society for the Protection of Birds

Mr David Pritchard (Board Member and Joint Committee Member appointed by the Secretary of State)

- Self-employed consultant in environmental policy
- Self-employed consultant in contemporary arts and cultural heritage
- Delegate, Wetlands International Association of Members
- Vice Chair, Bedford Creative Arts
- Chair, Chartered Institution of Water and Environmental Management Arts and Environment Network
- Member, Ecoart Network
- Member, Panel of Judges, 'World of Difference' environmental innovation award
- Member, Steering Group of Forestry Commission Grizedale Forest arts programme
- International Policy Adviser, Royal Society for the Protection of Birds
- Member, IUCN Task Force on Cultural and Spiritual Values of Protected Areas
- Member, Ramsar Convention Culture Working Group
- Chair, Working Group 3, Ramsar Convention Scientific & Technical Review Panel
- Member, Northumberland Wildlife Trust, Woodland Trust, Royal Society for the Protection of Birds, Research in Art, Nature & Environment Group University College Falmouth, Landscape and Arts Network

Mr Deryck Steer (Managing Director)

- Trustee and Treasurer, National Biodiversity Network
- Director, BioD Services
- Board Member, European Centre for Nature Conservation

Mr Andrew Thin (Board Member and Joint Committee Member appointed by Scottish Natural Heritage)

- Chair, Scottish Natural Heritage
- Vice Chair, Munlochy Parent Council
- Trustee, Munlochy Educational Trust/James Thin Charitable Trust
- Life Member, Scottish Youth Hostel Association
- Member, John Muir Trust/The Scottish Wildlife Trust

Professor Michael Usher (Board Member and Joint Committee Member appointed by the Secretary of State)

- Principal Editor, 'Ecology, Biodiversity & Conservation', Cambridge University Press
- International Fellow, Durrell Wildlife Conservation Trust, Jersey
- Fellow and Chartered Biologist, Institute of Biology
- Honorary Professor, University of Aberdeen
- Honorary Professor, University of Edinburgh
- Honorary Professor, University of Stirling
- Trustee, Royal Botanic Garden, Edinburgh
- Trustee, Woodland Trust
- Fellow, Royal Entomological Society
- Fellow, Royal Society of Edinburgh
- External Adviser, Irish Environmental Protection Agency
- Chairman of Programme 3 Group, Scottish Executive Environment & Rural Affairs Department
- Member, Botanical Society of the British Isles, British Arachnological Society, British Ecological Society, CADW (Heritage in Wales), National Trust, Scottish Wildlife Trust

Dr Malcolm Vincent (Director of Science)

Appointed to 30 September 2008

- Member, British Sub-Aqua Club, Nottinghamshire Wildlife Trust, Prospect Union

Professor Lynda Warren (Board Member and Joint Committee Member appointed by the Secretary of State)

- Board Member, British Geological Survey (NERC)
- Board Member, Environment Agency
- Member, Committee of Radioactive Waste Management
- Trustee, Field Studies Council
- Trustee, West and South Wales Wildlife Trust
- Associate Consultant, Integrated Decision Management
- British Institute for Geological Conservation, husband is treasurer

Judith Webb (Board Member and Joint Committee Member appointed by the Secretary of State)

- Self-employed environmental consultant – trading as J.W. Associates
- Non-executive Commissioner for Wales, the Forestry Commission
- Non-executive Director, the National Forest Company
- Secretary of State Appointee, Cotswolds Area of Outstanding Natural Beauty Conservation Board
- Member, Woodland Trust, British Association for Shooting and Conservation, British Deer Society, Royal Forestry Society

Mr Marcus Yeo (Director of Policy and Resources)

- Member, British Bryological Society, Prospect Union

Detailed Trading Profit and Loss Account for the year to 31 March 2009

	2008/09	2008/09	2007/08	2007/08
	£	£	(restated)	(restated)
Turnover				
JNCC grant-in-aid		7,646,643		7,872,946
European Union funding		37,146		463,979
Contributions to projects		1,215,775		956,176
Royalties		3,037		3,282
Scientific advice and information		12,967		18,119
Publication sales		35,543		55,630
Other receipts		175,912		170,014
		9,127,023		9,540,146
Cost of sales				
Conservation support	2,838,014		3,338,144	
Publicity and information	156,392		212,801	
Notional cost of capital	14,014		14,581	
Direct staff costs	4,419,223		4,254,889	
		(7,427,643)		(7,820,415)
Gross profit		1,699,380		1,719,731
Miscellaneous other income				
Interest received		18,006		25,173
		1,717,386		1,744,904
Overheads				
Directors' emoluments	331,168		320,895	
Other administrative costs	1,530,108		1,515,043	
Notional cost of capital	(14,014)		(14,581)	
Interest payable and similar charges	0		3	
Transfer from Government Grant reserve	(101,214)		(98,153)	
		(1,746,048)		(1,723,207)
Profit/(loss) on ordinary activities		(28,662)		21,697

The amounts in other administrative costs have been restated to separately disclose the reversal of the notional cost of capital charge on the face of the detailed profit and loss account.

JNCC Support Co – Schedule of overhead expenses for the year ended 31 March 2009

	2008/09	2008/09	2007/08	2007/08
	£	£	(restated)	(restated)
Directors' emoluments				
Directors' remuneration	283,955		274,610	
Directors' pension	47,213		46,285	
		331,168		320,895
Other administrative costs				
Temporary staff	6,647		14,797	
Depreciation and amortisation	101,214		98,153	
(Profit)/loss on disposal of assets	797		0	
Auditor's remuneration	12,000		28,967	
Reversal of notional cost of capital	(14,014)		(14,581)	
Training	63,892		39,100	
Recruitment	88,282		29,883	
Other audit fees	25,843		40,084	
Rent	252,101		277,040	
Rates	60,225		58,428	
Light and heat	16,962		16,082	
Repairs and renewals	100,025		140,390	
Protective clothing	1,165		1,744	
Computer maintenance	52,386		25,992	
Computer equipment	64,440		96,945	
Cleaning	25,872		22,411	
Sundry expenses, less recoveries	3,720		4,082	
Telephone	74,577		73,230	
Printing postage and stationery	40,175		44,382	
Subscriptions	18,923		18,255	
General insurance	6,728		6,722	
Motor expenses	3,626		7,315	
Travel and subsistence	419,931		404,279	
Entertainment	20,154		17,022	
Legal and professional fees	4,939		5,514	
Consultancy	62,950		42,860	
Bank charges	1,729		1,366	
Exchange rate losses & gains	805		0	
		1,516,094		1,500,462
Interest payable and similar charges				
Bank interest	0		3	
			0	3
Transfer from Government Grant reserve	(101,214)		(98,153)	
		(101,214)		(98,153)
Total overhead expenses		1,746,048		1,723,207

The amounts above include adjustments to the 2007/08 comparatives figures to reflect the reclassification of expenditure under the headings of Repairs and renewals, Computer maintenance, Computer equipment, Printing postage and stationery, Travel and subsistence and Consultancy.

JNCC performance against key performance indicators (KPIs) for 2008/09

- ▲ Target achieved or exceeded
- ▶ Substantial progress made, with full achievement of target anticipated early in 2009/10
- ▼ Limited progress against target
- D Target deferred or dropped as no longer appropriate for 2008/09

Key performance indicator	Year end rating	Comments relating to performance
Global Advice		
Contribute to achievement of the 2010 biodiversity target and relevant parts of the Government's Public Service Agreement () relating to the Millennium Development Goals by providing support to the Inter-Departmental Ministerial Group on Biodiversity.	▼	No meetings of the Inter-Departmental Ministerial Group on Biodiversity (IDMGB) took place during the year, and so limited progress was made against this target. Meetings of officials in support of the IDMGB took place in September and December and set a way forward for a future series of official level meetings. Progress is most likely to be achieved by this route but requires action to ensure official engagement continues.
Provide high-quality scientific input at key meetings of MEAs, in particular Conferences of the Parties for the Convention on Biological Diversity and the Bonn Convention in 2008, and the Convention on International Trade in Endangered Species in 2010, and associated preparatory meetings.	▲	In a concentrated year of Multilateral Environmental Agreement meetings, JNCC supported the UK delegations to the following meetings and helped to achieve successful outcomes: <ul style="list-style-type: none"> • 9th Conference of the Parties to the Convention on Biological Diversity • 10th Conference of the Parties to the Ramsar Convention • 9th Conference of the Parties to the Convention on Migratory Species • 4th Meeting of the Parties to the African-Eurasian Waterbird Agreement • Meetings on the African-Eurasian migratory raptor agreement and migratory sharks • Animals Committee of the Convention on the International Trade in Endangered Species
Provide, to agreed service standards, high-quality advice to Animal Health on approximately 20,000 CITES licence consultations per annum.	▲	Approximately 20,000 applications were advised upon this year, roughly the same as the previous year. Cumulative totals for priority 1 applications came to approximately 5.5% of the total – marginally over what is agreed in the service level agreement with Animal Health. Service standards slipped at times during the year due to staff changes but overall service standards were met.
Overseas Territories		
Take forward recommendations from the costed assessment of priorities for nature conservation in the Overseas Territories prepared for the Inter-Departmental Ministerial Group on Biodiversity.	▶	Defra provided JNCC with an additional £150k for work in the Overseas Territories in 2008/09 and this was spent on various priorities, including a pilot habitat mapping project in Turks and Caicos and studentships for undergraduates in the Overseas Territories. A database has been compiled of potential funding sources to support nature conservation in the Overseas Territories and Crown Dependencies, and this will be made available through a web-based search tool.
Facilitate collaboration between the UK science community and the Overseas Territories and Crown Dependencies, to establish research priorities to meet their needs, building on the 2007 assessment of terrestrial and marine research priorities undertaken by JNCC.	▲	A partnership arrangement with Reading University has been established. An Overseas Territories research prospectus is being developed, and Overseas Territories research leaflets have been produced.
Provide ongoing advice and support to UK Government departments and the Governments of the Overseas Territories and Crown Dependencies on the implementation of Multilateral Environmental Agreements. By March 2009: <ul style="list-style-type: none"> • produce an overview of Multilateral Environmental Agreements in the Overseas Territories; • working with the relevant Overseas Territory Governments and UK Government departments, prepare (and subsequently help to deliver) an implementation plan to meet commitments under the Agreement on the Conservation of Albatrosses and Petrels (ACAP). 	▲	An overview of Multilateral Environmental Agreements (MEAs) in the Overseas Territories has been produced. Systems for including Overseas Territories in consultation processes for MEA meetings are being trialled with the Ramsar Convention and the Convention on Migratory Species. Good progress has been made in supporting implementation of ACAP, including measures to reduce bycatch and participation in international meetings.

Key performance indicator	Year end rating	Comments relating to performance
UK's Global Impact		
<p>Produce up-to-date country analyses, tailored for both external use and internal policy development, in terms of UK foreign investment impacts, trends in food production that may influence biodiversity, and bioenergy policy developments and production patterns:</p> <ul style="list-style-type: none"> • by June 2008, develop an evidence-based JNCC policy framework on the relationship between global bioenergy and biodiversity, including the influence of the UK and EU in other countries; • by October 2008, prepare a report analysing the global distribution of UK overseas investment in terms of priority countries, industry sectors and ecosystems. 	▲	<p>Reports on the biodiversity footprint of UK overseas investment and bioenergy production were produced during the year.</p>
<p>By March 2009 (and periodically thereafter), update the global influence website to include a range of content covering trade, UK investment and biofuels data and analysis to support Defra's Sustainable Development Dialogues, the Export Credits Guarantee Department and JNCC's international work.</p>	▲	<p>Information held on the global influence website has been updated throughout the year, and a redesign of the website has been completed. A launch event was successfully held in January 2009.</p>
European Advice		
<p>Provide advice to the UK Government, devolved administrations and others to support the development and implementation of EU environmental legislation and policy, and to encourage the integration of sustainable development principles, the ecosystem approach and the protection of biodiversity, within the development of EU policies. By March 2009:</p> <ul style="list-style-type: none"> • develop an understanding of the implications of overlap, synergy and conflicts across the Habitats, Birds, Marine Strategy Framework and Environmental Liability Directives (and other EU directives that impact on nature conservation); • influence implementation of the Marine Strategy Framework Directive, to take account of nature conservation requirements by promoting existing marine work to relevant European stakeholders and trying to ensure synergy with other marine policy commitments (such as OSPAR); • work to ensure that sustainability and environmental dimensions are fully incorporated into proposals for the future of the EU's cohesion policy. 	▶	<p>The interplay between the nature Directives and their relationship with other EU legislation has been examined, and this issue was discussed by the Joint Committee in June 2008. Work has commenced on integrating the Marine Strategy Framework Directive (MSFD) into this process and improving understanding of how to link the Common Fisheries Policy and MSFD, although this work has progressed more slowly than expected because of staff changes.</p> <p>Advice and briefings have been provided for attendance at the EU Coordination Group for Biodiversity and Nature and advice on harmonisation of directives, reporting is continuing through representation on the Expert Reporting Group and sub-groups.</p> <p>The inter-agency European Regional Policy Group has contributed to the Commission Green Paper on EU Cohesion Policy.</p>
<p>Support the European work of the UK conservation bodies by providing regular briefings on the development of EU policy and legislation affecting the environment, supplemented by analyses of the implications for nature conservation.</p>	▲	<p>Intelligence on EU policy developments has been provided on a regular basis through the UK Nature and Landscape Office and a contract with the Institute for European Environmental Policy (IEEP). Following a tendering exercise, IEEP have been offered a new six-year contract to provide intelligence to JNCC and the country conservation bodies. The development of a website for improved delivery of intelligence is underway.</p>

Key performance indicator	Year end rating	Comments relating to performance
Sustainability Advice		
<p>Provide advice to UK Government and others on energy policy:</p> <ul style="list-style-type: none"> by December 2008, produce a position statement on energy issues affecting nature conservation in the UK and internationally; by March 2009, provide advice on the development of sustainability criteria for biofuels under the EU Renewable Energy Directive and other legislation/policies. 	▶	<p>During the year, JNCC continued to provide expert advice on biofuels and, in particular, sustainability criteria. We worked closely with Defra, the Department of Energy and Climate Change and the Department for Transport to find environmentally sound solutions, and responded to EU consultations on the Renewable Energy Directive and biomass.</p> <p>Following discussions with the country conservation bodies it was agreed not to produce an energy position statement, but to share information and collaborate on developing the evidence base for policy advice. A report on the nature conservation impacts of different energy mixes to 2050 was completed during the year.</p>
<p>Develop advice on priority climate change issues and contribute to relevant UK and international agreements:</p> <ul style="list-style-type: none"> by December 2008, work with Defra to provide briefs focusing on the interdependencies between climate change and biodiversity for the 14th Conference of the Parties to the UN Framework Convention on Climate Change; by March 2009, provide input to the development of the EU White Paper on adaptation to climate change. 	▶	<p>Input to the UN Framework Convention on Climate Change was provided to Defra through participation in the Convention on Biological Diversity's ad hoc technical expert group on Biodiversity and Climate Change. Publication of the EU White Paper on adaptation to climate change was delayed and few opportunities arose to influence its development.</p>
<p>Develop a range of tools to support application of the ecosystem approach targeted at UK, Overseas Territory and international audiences beyond the nature conservation sector:</p> <ul style="list-style-type: none"> by April 2009, produce a guide for policy makers on application of the ecosystem approach; by November 2009, work with government partners and others to develop tools which allow better valuation of ecosystem services and relate these to ecosystem function. 	▶	<p>Work on the guidance document for policy makers on application of the ecosystem approach will be completed in the first quarter of 2009/10. Funding from Defra has been used to create a DVD of the Overseas Territories economic valuation tool kit.</p>
Conservation Advice		
<p>Produce guidance on good practice for nature conservation management, and by December 2008, develop a web-based system providing access to guidance on good nature conservation practice.</p>	▶	<p>A web-based search engine, targeted at appropriate on-line management material, is operational. Testing is underway, prior to the upload of a final version onto the JNCC website later in 2009.</p>
<p>By March 2009, complete the preparation of written text for 98% of all Geological Conservation Review (GCR) sites.</p>	▲	<p>Text has been completed for 98% of all GCR sites. One new volume, <i>Lewisian, Torridonian and Moine Rocks of Scotland</i>, was published during the year.</p>
<p>By July 2009, collaborate with Defra to publish UK indicators measuring progress towards the 2010 biodiversity loss target.</p>	▲	<p>JNCC has provided scientific and technical input to meetings of both the Biodiversity Indicators Steering Group and the project group mandated to take the detailed work forward. An updated overview of the 2010 indicators (<i>UK Biodiversity Indicators in Your Pocket 2009</i>) was published in May 2009.</p>
<p>Continue to report on the implementation of Common Standards Monitoring, and facilitate easier, more efficient or more consistent implementation of the standards to ensure that robust information is obtained on the status of interest features on protected nature conservation sites across the UK:</p> <ul style="list-style-type: none"> by December 2008, undertake an initial review of the UK conservation bodies' quality assurance procedures for site monitoring; by June 2009, work with the UK conservation bodies to establish and implement a UK-wide quality assurance programme. 	D	<p>Because of staff changes and the strategy review, the Executive Management Board and the company board agreed that this target would be dropped in 2008/09. In 2009, this area of work will be reviewed as part of a wider review of UK conservation standards.</p>
<p>Establish a secretariat for the UK Geodiversity Action Plan (UKGAP) and support its implementation by publishing a strategy by December 2008 and establishing a website by March 2009.</p>	▲	<p>The UK Geodiversity Action Plan (UKGAP) has been finalised, following a consultation exercise initiated by Natural England, and a UKGAP website has been established. JNCC has been invited to provide a secretariat, caretaking and reporting role for the UKGAP.</p>

Key performance indicator	Year end rating	Comments relating to performance
Marine Management Advice		
Ensure that 95% of requests for statutory advice on offshore industries are responded fully to within the relevant consultation period.	▲	Consultations to which JNCC responded increased in both number and scope through the year. This trend is likely to continue in 2009/10 with the establishment of the new Marine Management Organisation.
By June 2008, report to Defra on the first public consultation on offshore SACs. In 2009, conduct a consultation and report on a second tranche of offshore sites, including Impact Assessment for each site. Develop and communicate Operations Advice on offshore SACs as they are recommended to Government.	▶	A consultation report on the first seven offshore SACs was delivered on time to Defra. The second tranche of two offshore sites has been advised to Government. Impact Assessment work has been completed, and pre-consultation meetings held with major stakeholders. The start of formal consultation has been delayed awaiting Cabinet clearance. Work on Operations Advice is in hand, but at a slower pace than planned due to the co-ordination effort required for consultation for inshore SACs.
By 2009, develop an influencing strategy for the 2012 review of the Common Fisheries Policy and start to implement it.	▶	The inter-agency Marine Fisheries Working Group agreed an approach to influencing the Common Fisheries Policy review which was discussed by the Joint Committee in December 2008. Following revision, it will be discussed again by the Committee in June 2009. It is likely that the influencing strategy will continue to develop throughout 2009/10.

Marine Mapping and Area Protection

<p>Recommend to Government a series of SACs in offshore waters, in conjunction with parallel work by the UK conservation bodies in inshore waters, to fulfil Habitats Directive obligations:</p> <ul style="list-style-type: none"> by December 2008, recommend to Government two further offshore SACs for Annex I habitats in UK waters, based on existing data; by March 2009, complete an assessment of the potential for identifying SACs for marine Annex II species away from the coast. 	▶	<p>SAC recommendations for Dogger Bank and North West Rockall Bank were endorsed by the Joint Committee in April 2008. The Dogger Bank proposal was revised in November 2008 to incorporate results of new survey. Two offshore SACs at Bassurelle Sandbank and Hatton Bank were endorsed by Joint Committee in December 2008, and two joint inshore/offshore sites in the outer Wash in March 2009. All recommendations have subsequently been formally advised to Defra and other government departments.</p> <p>Because of the volume of work required on habitat SACs, work on species has been deferred until 2009/10.</p>
<p>Advise Government on the identification of a series of SPAs in offshore waters, in conjunction with parallel work by the UK conservation bodies in inshore waters (based upon survey and analyses by JNCC), to fulfil Birds Directive obligations:</p> <ul style="list-style-type: none"> complete analyses in respect of possible offshore SPAs (by March 2009, complete report on analyses of offshore seabird distribution data); complete analyses of a further 15 inshore potential SPAs (by March 2009, conduct aerial surveys in 15 inshore SPA areas of search (weather permitting) and report on the waterbird interest in five of these inshore areas); complete work aimed at identifying marine SPAs for breeding terns by March 2011; deliver advice on possible marine SPAs for breeding red-throated divers (by October 2008, complete report). 	▶	<p>Analyses for offshore SPAs are complete. A report has been written, and is being modified following peer review. A full inshore aerial survey programme was carried out in the winter. Four reports covering several areas of search are 'in press' and further reporting and analyses were carried out for the Thames Estuary and Liverpool Bay SPAs.</p> <p>After disappointing fieldwork results in 2007, a workshop involving tern experts from the UK and Europe was organised in December 2008 to plan future work to identify possible tern SPAs. Fieldwork is planned for 2009, but the overall schedule of work has now slipped to 2012. A report on possible marine SPAs for breeding red-throated divers has been completed. Advice is being considered in association with SNH in the first instance.</p>
<p>By December 2008, complete maps for UK waters of habitats of conservation importance (including Habitats Directive Annex I, OSPAR and UK Biodiversity Action Plan listed habitats), to the extent possible using available data, modelling techniques and resources.</p>	▶	<p>Maps for Habitats Directive Annex I and OSPAR habitats have been created, but have not yet been delivered online. Maps of UK BAP habitats will be available in the first half of 2009/10.</p>

Key performance indicator	Year end rating	Comments relating to performance
Marine Mapping and Area Protection (ctd)		
<p>By Easter 2011, recommend to Government a set of Marine Conservation Zones (MCZs), identified through a stakeholder engagement process, as the offshore component of an ecologically-coherent suite of MPAs, which, together with SACs and SPAs, will meet the UK's obligations in relation to OSPAR, the Convention on Biological Diversity and the World Summit on Sustainable Development:</p> <ul style="list-style-type: none"> by March 2009, develop with government national guidelines for MCZ networks and for the operation of projects to identify MCZs in offshore waters. 	▶	<p>Progress has been hampered by delays in agreeing funding, recruitment problems for some new posts, and delays regarding the establishment of the Scottish Project Office. However, detailed project plans have been drawn up and slow progress to date can be rectified over the course of the project period.</p>
<p>By March 2009, provide UK information for the status assessment of the species and habitats on the Initial OSPAR List as a contribution to the 2010 OSPAR Quality Status Report, and develop the evidence base as a contribution to Charting Progress 2 and the UK Marine Monitoring and Assessment Strategy.</p>	▲	<p>Assessments for the three habitats for which JNCC leads on behalf of OSPAR were approved for publication by the Biodiversity Committee in February 2009. Advice was provided on the remaining species and habitat assessments being prepared by other Contracting Parties.</p> <p>A regional assessment methodology was rolled out at the Charting Progress 2 habitats workshop in November 2008. However, because of other priorities, assessments of the OSPAR habitats could not be undertaken. A more restricted reporting of UK BAP habitats has been included in Charting Progress 2, rather than a full structured assessment which will be developed in due course.</p>
Surveillance and Monitoring		
<p>Develop and implement a terrestrial biodiversity surveillance strategy, and by March 2009, determine how to implement the surveillance strategy and improve its linkage with research and reporting strategies.</p>	▲	<p>Terms of reference for a biodiversity surveillance strategy implementation group have been agreed. The group will comprise representatives from government, country conservation bodies, NGOs and research bodies, and will report to the UK Biodiversity Partnership Standing Committee.</p>
<p>By June 2009, finalise proposals for marine biodiversity surveillance as a contribution to the UK Marine Monitoring and Assessment Strategy, and formulate an implementation plan.</p>	▶	<p>Defra funding of a joint project with Natural England has been agreed that will deliver over the next three years implementation options for surveillance/monitoring of marine biodiversity.</p>
<p>By June 2009, support the Policy-relevant Information programme's application of evidence with a thematic analysis of the impact of wide-scale pressures on biodiversity.</p>	▲	<p>The main area of activity has been to support Defra's Biodiversity Impact of Climate Change Observation Network (BICCONET) project, an initiative which provides an opportunity to collate evidence on biodiversity changes due to climate change. Thematic work has also started on air pollution and the evidence gaps around landscape-level policy.</p>
<p>By end of December 2009, advise Defra, devolved administrations and country conservation bodies on the implications of proposed revisions to regulations implementing the Habitats Directive surveillance and monitoring articles. Ensure advice helps implement marine and terrestrial surveillance and monitoring strategies.</p>	▲	<p>JNCC provided advice on the implications of the proposed revisions to regulations, as required. We also organised an inter-agency review of the implications of the revised regulations, provided guidance on who should undertake the new analyses that the country conservation bodies are responsible for, and advised Defra on the level of co-ordination needed to avoid future infraction risk.</p>
Access to Information		
<p>Support the development and use of the National Biodiversity Network (NBN), and by March 2009, work with data providers to implement the software tools developed to improve the flow of data to the NBN Gateway and increase the volume of data available through the Gateway to 35 million records.</p>	▲	<p>The target of 35 million records has been achieved. In addition, there has been a very good uptake of Recorder across Local Records Centres, and substantial progress has been made with the development of a data validation tool which should significantly improve the quality and flow of data in future.</p>
<p>By March 2009, complete the restructuring of the JNCC website to better reflect the JNCC's strategy, and establish a reliable on-going editorial process to maintain its currency.</p>	D	<p>Because of recruitment problems and the strategy review, the Executive Management Board and the company board agreed during the year to postpone restructuring of the website to 2009/10.</p>

Key performance indicator	Year end rating	Comments relating to performance
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Policy-Relevant Information and Reporting

By March 2009, establish a clear understanding of JNCC and country agency research needs, and identify means for undertaking this research cost-effectively.	▶	An analysis of research needs has been substantially completed. The outcomes from this work have been used to influence priority spend within Defra research and development programmes, and the nature of calls within the EU Seventh Framework Programme's environment theme and the EU BiodivERsA research programme.
By March 2009, ensure that devolved implementation of the UK Biodiversity Action Plan (BAP) reviews is fully supported and that JNCC's role is clearly defined and understood.	▶	This challenging piece of work has been nearly completed and will facilitate more efficient delivery of JNCC's contribution to the UK BAP from 2009/10 onwards.
By March 2010, through development of the UK Nature Barometer produce evidence on changes in UK biodiversity and the environmental pressures driving change, and by June 2009 produce a report on the State of UK Nature.	▲	The 2007 State of Nature report has been updated and contributed to a substantial chapter on the state of UK nature in the 4th National Report to the Convention on Biological Diversity (CBD), which focuses on achievement of the 2010 target. The CBD report also included an update of the UK 2010 biodiversity indicators.

Governance and Corporate Services

Ensure corporate services are provided in a cost-effective manner that meets the needs of internal and external stakeholders, and by March 2009, undertake a full service review to set the required level of service and to define options for providing this for costs that range from plus 5% to minus 5%.	▼	Because of other priorities, the Executive Management Board agreed to postpone the service review to 2009/10, and to focus the review on internal service provision.
By March 2009, after consultation with stakeholders, update JNCC's strategy to reflect current internal and external factors, including the Joint Committee's vision.	▲	The Joint Committee endorsed a new vision and mission in March 2009, following consultation with UK Government, devolved administrations and country conservation bodies. Where possible, the new strategic direction is reflected in the business plan for 2009/10.
By March 2010, migrate JNCC's historical electronic information into a shared filing system to improve data retrieval and working practices.	▶	Successful implementation of Office 2007 has given a good foundation to migrating electronic data into a new shared filing system.

Research contracts 2008/09

Title	Contractor	£
Bird and cetacean species observed during ship surveys off SW England	Adam Batty	5,582
National Bat Monitoring Programme	Bat Conservation Trust	93,194
Geological data interpretation reef east of Shetland	British Geological Survey	11,945
JNCC offshore programme 2009/10	British Geological Survey	13,067
Shore-based counts of seaduck, divers and grebes	British Trust for Ornithology	331 *
Services in ornithology	British Trust for Ornithology	623,615
Annual statistical analysis of mammal data from the Breeding Bird Survey, 2007–2010	British Trust for Ornithology	9,711
Non-breeding waterbirds analysis for Charting Progress 2	British Trust for Ornithology	8,206
Dogger Bank offshore draft SAC	Centre for Environment, Fisheries & Aquaculture Science	94,283
JNCC offshore programme 2008/09	Centre for Environment, Fisheries & Aquaculture Science	338,044
Isle of May seabird studies 2008	Centre for Ecology and Hydrology	14,196
Extending the use of butterfly recording data in the UK	Centre for Ecology and Hydrology	40,000
Biological Records Centre	Centre for Ecology and Hydrology	169,792
Development and service of the NBN Gateway 2008/09	Centre for Ecology and Hydrology	63,655
An analysis of methodologies for defining ecosystem services	Centre for Environmental Management, University of Nottingham	22,367
Monitoring of seabird breeding success on Orkney mainland	Dennis Paice	3,300
Using Marxan to test Marine Conservation Zone network design criteria and ecological objectives	Dr Bob Smith	3,788
A review of methodologies that could be used to formulate a Marine Protected Area network	Dr Carlo Rondinin	14,935
<i>Modiolus</i> beds – OSPAR habitat assessment	Dr Ivor Rees	2,250
<i>Lophelia pertusa</i> – OSPAR habitat assessment	Dr J Hall-Spencer	6,410
Offshore Special Areas of Conservation – preparation of impact assessments	Economics for the Environment Consultancy Ltd	17,881
Reef east of Shetland – biological data analysis	Envision Mapping Ltd	32,929
Fair Isle seabird studies 2008	Fair Isle Bird Observatory Trust	8,401
National Gamebag Census mammal analysis	Game Conservancy Trust	11,314
Canna seabird studies 2008	Highland Ringing Group	2,300
Provision of evidence of the conservation impacts of energy production	Institute for European Environmental Policy	10,211
Provision of advice to the Land Use Policy Group on EU agriculture and environment policies	Institute for European Environmental Policy	8,769
European intelligence contract	Institute for European Environmental Policy	89,400
Identification of methods, permanent and unique marking of juvenile turtles	International Zoo Veterinary Group	25,988
Provision of updated information on non-native species in the UK's Overseas Territories and Crown Dependencies	Karen Varnham	5,000
Provision of secretariat services to the Rare Breeding Birds Panel	Mark Holling	11,000
Developing a mechanism for filling knowledge gaps in UK BAP species	Peakecology	15,000
Seabird observation work on board the fisheries research vessel 'Endeavour', 16–25 March 2009	Ray Eades	3,003
Biofuel/bioenergy sustainability indicators project – a case study	Scott Wilson	3,762
Shore-based counts of seaduck, divers and grebes in inshore waters of the inner Clyde	Starling Learning	989
Analysis of methodologies for defining ecosystem services	Steve Duffield	2,408
Monitoring of severe weather	The Meteorological Office	4,038
Marine assessment and monitoring framework for application by the UK Marine Monitoring and Assessment Strategy and OSPAR (including Phase III)	University of Liverpool	28,605
Skomer seabird monitoring (seabird survival studies) 2008	University of Oxford – Edward Grey Institute	6,824
Goose and swan monitoring programme	Wildfowl & Wetlands Trust	19,578
Seabird survival monitoring on Skomer 2008	Wildlife Trust of South & West Wales	7,461

* Contract value reflects early termination, due to unforeseen circumstances

Reports, papers and publications

April 2008 – March 2009

Authors who are not JNCC Support Co staff are shown in square brackets.

Books published by JNCC

Annual Report 2007/2008

JNCC, Peterborough. 2008. ISBN: 978 0 10 295532 3
www.jncc.gov.uk/page-4434

[JR Mendum, AJ Barber, RWH Butler, D Flinn, KM Goodenough, M Krabbendam, RG Park, AD Stewart]

Lewisian, Torridonian and Moine Rocks of Scotland

GCR Series No 34. JNCC, Peterborough. 2008. ISBN: 978 1 86107 483 6

T Weighell

The biodiversity footprint of UK Foreign Direct Investment

JNCC, Peterborough. 2009. ISBN: 978 1 86107 610 6

JNCC report series

[N Dawson], I Sohle, LJ Wilson, BJ Dean, A Webb, JB Reid

The numbers of inshore waterbirds using the Firth of Forth during the non-breeding season, and an assessment of the area's potential for qualification as a marine SPA.

Report 402, Peterborough. 2008. www.jncc.gov.uk/page-4484

CA McSorley, LJ Wilson, TE Dunn, [C Gray], BJ Dean, A Webb, JB Reid

Manx shearwater evening rafting behaviour around colonies on Skomer, Rum and Bardsey.

Report 406, Peterborough. 2008. www.jncc.gov.uk/page-4516

[A Mitchell, A Mellor, J Strong, M Service]

Broad-scale seabed habitat survey of a sandbank to the east of the Isle of Man

Report 409, Peterborough. 2008. www.jncc.gov.uk/page-4449

[A Mellor, A Mitchell, J Strong, L Rooney, M Service]

North West Irish Sea mounds: hard and soft substrata habitats

Report 410, Peterborough. 2008. www.jncc.gov.uk/page-4493

[M Dalkin]

Mid Irish Sea reefs habitat mapping report

Report 411, Peterborough. 2008. www.jncc.gov.uk/page-4518

[ER Lovell], C McLardy

Annotated checklist of the CITES-listed corals of Fiji with reference to Vanuatu, Tonga, Samoa and American Samoa

Report 415, Peterborough. 2008. www.jncc.gov.uk/page-4476

[KL Howell, JS Davies, C Jacobs, BE Narayanaswamy]

Broad-scale survey of the habitats of Rockall Bank and mapping of Annex I 'reef' habitat

Report 422, Peterborough. 2009. www.jncc.gov.uk/page-4653

V Blyth-Skyrme, [CJ Lindenbaum], E Verling, [K Van Landeghem, K Robinson, A Mackie, T Darbyshire]

Broad-scale biotope mapping of potential reefs in the Irish Sea (north-west of Anglesey)

Report 423, Peterborough. 2008. www.jncc.gov.uk/page-4542

[A Mitchell]

Broad-scale subtidal biotope mapping to the west of the Outer Hebrides, Scotland, UK

Report 424, Peterborough. 2009. www.jncc.gov.uk/page-4591

[A Mitchell, M Service, R Bates]

Blackstone Bank and Stanton Banks habitat mapping

Report 425, Peterborough. 2009. www.jncc.gov.uk/page-4654

[JP McWilliams]

Implications of climate change for biodiversity in the UK Overseas Territories,

Report 427, Peterborough. 2009. www.jncc.gov.uk/page-4602

[I Lutchman, K van den Bossche, F Zino]

Implementation of the CFP – an evaluation of progress made since 2002

Report 428, Peterborough. 2008. www.jncc.gov.uk/page-4765

Web publications 2008–2009

T Weighell

Tracking biofuels policy development in selected overseas economies.

Phase I: data sources, global trends and overview of biodiversity impacts

JNCC, Peterborough. 2008.

www.jncc.gov.uk/pdf/global_BiofuelsandBiodiversity1.pdf

T Weighell

Tracking UK Foreign Direct Investment (FDI) into selected overseas economies.

Phase I report

JNCC, Peterborough. 2008.

www.jncc.gov.uk/pdf/global_trackingUKForeignDirectInvestmentSummary1.pdf

EH Pinn

Formal review of research and development of contract CRO 364 –

cetacean strandings around the UK coast. 2008.

http://science.defra.gov.uk/Document.aspx?Document=WC0601_7415_GEN.pdf

EH Pinn

Thresholds for the designation of Special Areas of Conservation for harbour

porpoise and other highly mobile, wide ranging marine species

www.jncc.gov.uk/pdf/JNCC_P10Sept08Annex1_amendedFeb09.pdf

[SJ Dolman, RJ Reid, JP Barley, R Deaville, PD Jepson, M O'Connell, S Berrow, RS Penrose], EH Pinn, [PT Stevick, S Calderan, KP Robinson, TK Doyle, RL Brownell Jr, MP Simmonds]

A preliminary note on the unprecedented strandings of 45 deep-diving odontocetes along the UK and Irish coast between January and April 2008.

Report to the Scientific Committee No. SC-60-E5

www.iwcoffice.org/documents/sci_com/SC60docs/SC-60-E5.pdf

M Parsons, I Mitchell, [A Butler, N Ratcliffe, M Frederiksen]

Summary of analysis of trends in UK seabird abundance and breeding success

1969–2007 – latest analysis of Seabird Monitoring Programme data.

www.jncc.gov.uk/page-4467

[L Thomas, CREEM, St Andrews University]

Potential use of Joint Cetacean Protocol data for determining changes in

species' range and abundance: exploratory analysis of southern Irish Sea Data

www.creem.st-and.ac.uk/len/papers/ThomasJNCC2008.pdf

[This work was funded by CCW and NPWS with the contract managed by JNCC. This work is part of the Joint Cetacean Protocol project.]

Global Environmental Change Committee (GECC)

Global Biodiversity Sub-Committee (GBSC) website

www.jncc.gov.uk/page-4628

Climate change in the UK Overseas Territories: an overview of the science, policy and you

www.jncc.gov.uk/pdf/ot_A1ClimatechangeintheukKOTsanoverviewofthescience,policyandyou.pdf

Climate change: a practical guide for your organisation

www.jncc.gov.uk/pdf/ot_Capacticalguideforyourorganisation.pdf

Climate change: a practical guide for you

www.jncc.gov.uk/pdf/ot_DapacticalguideforyouD.pdf

Guidance for biodiversity conservation and management in a changing climate in the UK Overseas Territories

www.jncc.gov.uk/PDF/ot_Guidance%20A1.pdf

Climate change in the UK Overseas Territories (DVDs): Part 1: Impacts and Part 2: Adaptation and mitigation

www.jncc.gov.uk/page-4362

Surveillance strategy web pages – UK terrestrial biodiversity surveillance strategy and supporting products launched online
www.jncc.gov.uk/page-3713

Vegetation sampling workshop report
www.jncc.gov.uk/page-4424

Air pollution and climate change paper – initial analysis of data needs for understanding air pollution and climate change impacts and the potential role of the Environmental Change Biodiversity Network
www.jncc.gov.uk/page-4424

Online database of national terrestrial biodiversity surveillance schemes and a summary of their results
www.jncc.gov.uk/page-3721

Seabirds and seaduck webpages – revamped to allow online submission and downloading of data
www.jncc.gov.uk/page-1530

Species conservation designations – update to the lists of species' conservation designations
www.jncc.gov.uk/page-3408

Other JNCC publications/publications involving JNCC staff

Nature News

Issue 17 – Spring 2008 – www.jncc.gov.uk/page-4323

Issue 18 – Summer 2008 – www.jncc.gov.uk/page-4442

Issue 19 – Winter 2009 – www.jncc.gov.uk/page-4541

[DB Irons, T Anker-Nilssen, AJ Gaston, GV Byrd, K Falk, G Gilchrist, M Hario, M Hjernquist, YV Krasnov, A Mosbech, B Olsen, A Petersen], JB Reid, [GJ Robertson, H Strom, KD Wohl]

Fluctuations in circumpolar seabird populations linked to climate oscillations
Global Change Biology 14: 1455–1463. 2008.

M Parsons, I Mitchell, [A Butler, N Ratcliffe, M Frederiksen, S Foster], JB Reid
Seabirds as indicators of the marine environment
ICES Journal of Marine Science, 65: 1520–1526. 2008.

Wetland management planning – a guide for site managers
Ramsar-CEPA-Eng. 2008.

[R Jovani], R Mavor, [Oro, D]
Hidden patterns of colony size variation in seabirds: a logarithmic point of view
Oikos, Volume 117. 2008.

[S Murray, S Money, A Griffin], PI Mitchell
A survey of Leach's *Oceanodroma leucorhoa* and European storm petrel *Hydrobates pelagicus* populations on North Rona and Sula Sgeir, Western Isles, Scotland
Seabird, Volume 21. 2008.

[SE Newson], PI Mitchell, M Parsons, SH O'Brien, [GE Austin, S Benn, J Black, J Blackburn, B Brodie, E Humphreys, D Leech, M Prior, M Webster]
Population decline of Leach's storm-petrel *Oceanodroma leucorhoa* within the largest colony in Britain and Ireland
Seabird, Volume 21. 2008.

[S Money], I Sohle, M Parsons
A pilot study of the phenology and breeding success of Leach's storm-petrel *Oceanodroma leucorhoa* on St Kilda, Western Isles
Seabird, Volume 21. 2008.

M Parsons, I Mitchell, [A Butler, N Ratcliffe, M Frederiksen, S Foster], JB Reid
Seabirds as indicators of the marine environment
ICES Journal of Marine Science, 65: 8. 2008.

I Mitchell
Helping seabirds help us: recognizing their power as indicators
ICES Insight, Issue 45. 2008.

I Mitchell, with contributions from M Parsons, J Reid, M Tasker
Report of the workshop on seabird ecological quality indicator, 8–9 March 2008, Lisbon, Portugal
ICES, CM 2008/LRC:06. 2008.

5.5% du territoire maritime, L'aire marine
Carnet de bord, Decembre 2008, numero 3
Interview with Charlotte Johnston of JNCC

NV Ellis

A history of the Geological Conservation Review
In *The history of geoconservation* (eds CV Burek and CD Prosser)
The Geological Society, London, Special Publication, 300, pp 123–135. 2008.

[RA Robinson, HQP Crick, JA Learmonth], IMD Maclean, [CD Thomas, F Bairlein, MC Forchhammer, CM Francis, JA Gill, BJ Godley, J Harwood, GC Hays, B Huntley, AM Hutson, GJ Pierce, MM Rehfish, DW Sims, MB Santos, TH Sparks], DA Stroud, [ME Visser]

Travelling through a warming world – climate change and migratory species
Endangered Species Research. doi: 10.3354/esr00095. 2008

[J Bowler, C Mitchell, R Broad, A Leitch], DA Stroud
Wintering wader surveys on the Isle of Tiree, Argyll
Scottish Birds 28: 32–41. 2008.

[CV Wernham, B Etheridge, M Holling, G Riddle, HT Riley, PK Stirling-Aird], DA Stroud, [DBA Thompson, JD Wilson]

The Scottish Raptor Monitoring Scheme: objectives, achievements in the first four years, and plans for future development
Ambio 37(6): 460–464. 2008.

[UW Hesterberg, K Harris, R Moir], DA Stroud, [C Fabre, T Knight-Jones, B Londt, A Cook, I Brown]

Annual Report on surveillance for avian influenza in wild birds in the EU during 2007
Veterinary Laboratories Agency, UK. Report to DG SANCO, Brussels. 2008.

[AD Fox], DA Stroud, [A Walsh, HJ Wilson, DW Norriss, IS Francis]
A review of changes in abundance of the Greenland white-fronted goose *Anser albifrons flavirostris* since 1982
Vogelwelt 129: 317–325. 2008.

[M Holling & the Rare Breeding Birds Panel]
Rare breeding birds in the United Kingdom in 2005
British Birds 101: 276–316. 2008.

[NHK Burton, MM Rehfish], DA Stroud, [CJ Spray] (eds)
The European non-estuarine coastal waterbird survey
International Wader Studies 18. International Wader Study Group, Thetford, UK. 2008.

[NHK Burton, MM Rehfish]
The European non-estuarine coastal waterbird survey: background and methodology
Pp 1–3. In: [NHK Burton, MM Rehfish], DA Stroud, [CJ Spray] (eds)
The European non-estuarine coastal waterbird survey. International Wader Studies 18. International Wader Study Group, Thetford, UK. 2008.

[MM Rehfish, SJ Holloway, GE Austin]
Population estimates of waders on the non-estuarine coasts of the UK and Isle of Man during the winter of 1997–98
Pp 22–32. In: [NHK Burton, MM Rehfish], DA Stroud, [CJ Spray] (eds)
The European non-estuarine coastal waterbird survey. International Wader Studies 18. International Wader Study Group, Thetford, UK. 2008.

[NHK Burton, J Blew, K Colhoun, J Cortes, B Deceuninck, K Devos, F Hortas, L Mendes, L Nilsson, D Radovic, MM Rehfish, M van Roomen, C Soldatini, O Thorup], DA Stroud

Population status of waders wintering on Europe's non-estuarine coasts
Pp 95–101. In: [NHK Burton, MM Rehfish], DA Stroud, [CJ Spray] (eds)
The European non-estuarine coastal waterbird survey. International Wader Studies 18. International Wader Study Group, Thetford, UK. 2008.

[MM Rehfish, GE Austin, NHK Burton]

The future of wader monitoring on Europe's non-estuarine coast

Pp 103–108. In: [NHK Burton, MM Rehfish], DA Stroud, [CJ Spray] (eds)
*The European non-estuarine coastal waterbird survey. International Wader
Studies* 18. International Wader Study Group, Thetford, UK. 2008.

[GE Austin, M Collier, N Calbrade, C Hall, A Musgrove]

Waterbirds in the UK 2006/07. The Wetland Bird Survey

BTO, WWT, RSPB & JNCC. Thetford. 2008.

Land Use Policy Group

**Securing our common future through environmentally sustainable land
management: The Land Use Policy Group vision for the future of the CAP
post 2013.** 2009.

www.lupg.org.uk/pdf/LUPG_Vision_Final.pdf.

[M Grandgeorge, S Wanless], TE Dunn, [M Maumy, G Beaugrand, D Grémillet]

Resilience of the British and Irish seabird community in the twentieth century

Aquatic Biology 4: 187–199. 2008.

SH O'Brien, LJ Wilson, A Webb, [P Cranswick]

**Revised estimate of numbers of wintering red-throated divers *Gavia stellata*
in Great Britain**

Bird Study 55, 152–160. 2008.

LJ Wilson, CA McSorley, [CM Gray], BJ Dean, TE Dunn, A Webb, JB Reid

Rafting behaviour of Manx Shearwaters *Puffinus puffinus*

Seabird 21: 85–93. 2008.

[RS George]

Atlas of the fleas *Siphonaptera* of Britain and Ireland

Field Studies Council. 2008.

[S Gillings, PW Atkinson, MJ May, RJ Fuller]

**The potential implications for birds of reform of the sugar beet industry
in England**

BTO Research Report 527, BTO, Thetford.

[S Gillings, RJ Fuller]

**How many Eurasian Golden Plovers *Pluvialis apricaria* and Northern Lapwings
Vanellus vanellus winter in Great Britain? Results from a large-scale survey
in 2006/07**

Wader Study Group Bulletin 116: 21–28. 2009.

[I Henderson]

**A review of UK agricultural biofuels: potential effects on birds and knowledge
gaps for bird conservation in the UK**

BTO Research Report 533, BTO, Thetford.

[K Risely, DG Noble, SR Baillie]

The Breeding Bird Survey 2007

BTO research report 508, BTO, Thetford. 2008.

[DE Balmer, L Coiffait, JA Clark], RA Robinson

Bird ringing

BTO, Thetford. 2008.

RA Robinson, [DE Balmer, JH Marchant]

Survival rates of hirundines in relation to British and African rainfall

Ringling & Migration 24: 1–6. 2008.

[PA Davey, NJ Aebischer]

**Participation of the National Gamebag Census in the mammal surveillance
network**

Game and Wildlife Conservation Trust, Fordingbridge. 2009.

[CD MacLeod, CR Weir, MB Santos], TE Dunn

**Temperature-based summer habitat partitioning between white-beaked
and common dolphins around the United Kingdom and Republic of Ireland**

Journal of the Marine Biological Association 88: 1193–1198. 2008

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