

Joint Links Fitness Check Evidence Submission 25/03/2015 (Updated 29/04/2015)

Annex I: Effectiveness Case Studies

Case Study S.1.1 (i): Bittern

Bitterns, *Botaurus stellaris*, which are listed on Annex I of the Birds Directive were once common in wetlands, but became extinct as breeding birds in the UK in the late 19th century, as a result of wetland drainage and hunting. Although bitterns had returned by the 1950s, numbers dropped again as their reedbed habitats became drier through lack of management. By 1997 only 11 booming bitterns were recorded in the UK and there was a similar pattern of decline in bitterns across western Europe. Special Protection Area (SPA) designation has protected key sites for this species, helping to bring the bittern back from the brink of extinction, and EU LIFE funding supported two projects focussed on reedbed habitat restoration and creation. By 2004, the UK bittern population had risen to a minimum of 55 booming male birds, thus achieving the UK's 2010 Biodiversity Action Plan target.¹ The bittern's recovery has continued over the last decade.

Case Study S.1.1 (ii): Smew

New research using data collected across 16 countries by volunteers taking part in the Wetland Bird Survey shows that SPAs facilitate distribution change in response to climate change across a species' entire range. Currently, one third of the total smew population winters in north-eastern Europe, compared to 6% two decades ago. Furthermore, the population growth rate in this region was also twice as fast inside SPAs compared to those outside over the last 25 years. These findings confirm that the existence of SPAs assists species to cope with climate change. However, the results also highlighted severe gaps in the EU SPA network, especially in northern parts of the wintering range.²

Case Study S.1.1 (iii): Red kite

After being formerly widespread, red kites were reduced to just 10 pairs by the mid 1930s, as a result of persecution. Legal protection under national law and under the Birds Directive was instrumental in supporting the recovery of the red kite, although by the mid 1980s, there were still fewer than 100 pairs, concentrated in Wales

A programme of reintroduction projects were initiated across the UK, which helped bring the species back to its former haunts. Protection under Article 5 of the Birds Directive has helped to address persecution threats faced by red kites where birds have been successfully reintroduced to former habitats throughout the UK. These reintroductions have been hugely successful, with approximately 8% of the global population currently breeding in the UK. Declines elsewhere in Europe, coupled with continued increases in the UK, mean the importance of these populations on a global scale is increasing³.

¹ <http://www.rspb.org.uk/ourwork/conservation/species/casestudies/bittern.aspx>

² <http://www.bto.org/science/latest-research/protected-areas-help-rare-duck-adapt-climate-change>

³ http://ec.europa.eu/environment/nature/conservation/wildbirds/action_plans/docs/milvus_milvus.pdf

Case Study S.1.1 (iv): Bats

A recent paper in *Biological Conservation*⁴ suggests that following significant declines of all bat species in the UK in the last century, a number of species monitored between 1997 and 2012 may be starting to show early signs of recovery. However, continued long-term monitoring will be fundamental to verifying this and there remains a long way to go before former significant declines are reversed.

These findings mirror those in a recent EEA technical report⁵ and paper⁶ showing that, following a period of strong decline in the 20th century, bat species across 9 European countries appear to have increased by 43% at hibernation sites between 1993 and 2011, with a relatively stable trend since 2003. Monitoring programmes are needed across Europe to ensure robust information on trends in bat populations at a range of geographic scales.

Case Study S.1.1 (v): Beaver

The UK's recently adopted Infrastructure Act 2015 has introduced some new 'species control' provisions that will allow, in certain circumstances in England and Wales, the eradication of animals from private land. These provisions apply to both invasive species and to a category being called 'no longer normally present' species (previously native species that have become extinct in Great Britain). The tests that must be satisfied before eradication can take place are less onerous than those set out in the Habitats Directive. Although the Eurasian beaver has specifically been brought within the scope of the species control provisions through inclusion on a list in the relevant legislation, the protection afforded by the Habitats Directive's species protection provisions should mean that greater care and consideration will be given to situations involving beavers.

Case Study S.1.1 (vi): Improving marine protection in the UK (The Habitats Directive 92/43/EEC)⁷

The coastline and seas around the United Kingdom have a remarkable marine biodiversity and provide rich natural resources for many activities such as fisheries, industry and recreation. Yet, until recently, actions to protect this fragile marine environment were relatively few and far between.

The adoption of the Habitats Directive marked a significant step change for marine conservation in the UK, and elsewhere in the EU. For the first time, countries had to protect biodiversity in their surrounding seas as well as on land, and take measures to actively conserve threatened marine species, such as the bottlenose dolphin and Loggerhead sea turtle, as well as valuable underwater habitats, such as cold water reefs, *Posidonia* beds and underwater sea caves.

In the UK, major marine surveys were launched to learn more about the state of this secret underwater world and to help identify suitable sites for protection. This resulted in the designation of over 100 UK marine Natura 2000 sites (covering an area the size of Belgium). Before the Habitats Directive came into force there were just three protected marine areas in the UK. Work is now underway to manage the areas in a way that ensures their wise use whilst safeguarding their rich marine biodiversity.

⁴ <http://www.sciencedirect.com/science/article/pii/S0006320714004479>

⁵ <http://www.eea.europa.eu/publications/european-bat-population-trends-2013>

⁶ <http://www.sciencedirect.com/science/article/pii/S1616504714001098>

⁷ Text from: The Habitats Directive. Celebrating 20 years of protecting biodiversity in Europe. 2012, Kirsten Sundseth, Ecosystems LTD, Brussels. http://ec.europa.eu/environment/nature/pdf/20yrs_brochure.pdf

Case Study S.1.1 (vii): Flow Country LIFE projects

HD financing objective Art 8; Habitat restoration: HD Art 2 and BD Art 3.

The Flow Country is the common name for the vast blanket peatlands of Caithness and Sutherland - mainland Scotland's northern-most counties. As well as storing over 400 million tonnes of carbon, this area is a stronghold for a wide variety of wildlife, such as otters, water voles, mountain hares, greenshank, dunlin, black-throated divers and hen harriers. Most of the key areas are now protected as the Caithness and Sutherland Peatlands Special Area for Conservation (SAC) (144,000 ha) and SPA (146,000 ha).

In 2001 the EU's LIFE programme helped fund a £2.8 million project, led by a partnership of RSPB Scotland, Scottish Natural Heritage, the Forestry Commission and Plantlife, to bring conservationists and foresters together to restore damaged blanket bog across the protected sites and at a landscape scale.^{8,9}

Case Study S.1.1 (viii): Sustainable marine practices in Wales

In Wales dredging for King scallops has been carried out in Cardigan Bay for many years but until recently at a relatively low level with minimal impact on the bay's biodiversity. Parts of Cardigan Bay have been designated as a SAC, alongside the nearby Pembroke Marine SAC.

The situation changed in 2006, when up to 60 scallop dredgers were reported operating in the Bay at one time, including within the boundaries of the Cardigan Bay SAC, and further south in Pembroke Marine SAC. The increased scallop fishing pressure threatened the biodiversity of the bay by potentially causing impacts on the population of bottlenose dolphin from the deterioration of habitat and prey depletion.

Pressure from within Welsh inshore fishing fleets, environmental NGOs and politicians resulted in the Wales Scallop Order (2010)¹⁰ that closed all inshore waters to scallop dredgers, whilst allowing boats access to part of one site (Cardigan Bay). The Order shows the importance of the Directive in protecting sustainable fishing practices from the most damaging practices that can emerge, whilst protecting the interests of biodiversity and most local inshore Welsh fishermen (who use sustainable pot fishing).

Case Study S.1.1 (ix): North and east coast moratorium on aquaculture in Scotland

In Scotland, there is a moratorium on the placing of marine cage salmon farms on the north and east coasts of Scotland. This is, at least in part, based upon the presence in east Scotland of the major salmonid rivers including those designated as SACs for Atlantic salmon (Rivers Tay, Dee, and Spey).

While there are a number of reasons for the moratorium, the presence of these SACs is a significant factor in its maintenance and it largely protects those populations of Atlantic salmon from genetic introgression from escaped farmed fish (which are usually of Norwegian genetic origin) and from disease and parasites emanating from fish farms, including sea lice, which cause significant mortality in wild salmon smolts. The added benefit is that the moratorium protects Atlantic salmon populations from all those non-SAC rivers also covered by the moratorium.

⁸ http://www.rspb.org.uk/Images/flowcountry_tcm9-286460.pdf

⁹ <http://www.rspb.org.uk/reserves/guide/f/forsinard/work.aspx>

¹⁰ <http://www.legislation.gov.uk/wsi/2010/269/contents/made>

Case Study S.1.1 (x): Monitoring of bottlenose dolphin in the Moray Firth SAC

In May 2005, the original condition monitoring assessment of the Moray Firth bottlenose dolphin SAC concluded that the current condition of the population was 'Unfavourable (no change)'. Subsequent analysis of monitoring data from 2003 and 2004 indicated that there was a higher probability that targets were being met, and this was reflected in a revision of the condition status to 'Unfavourable (recovering)'¹¹. The report for 2008 to 2010 suggested that despite inter-annual variability, the number of dolphins using the SAC between 1990 and 2010 had remained stable; that there was a $\geq 99\%$ probability that the east coast of Scotland dolphin population is stable or increasing; and although the proportion of the dolphin population that use the SAC has declined, the overall population size is believed to have increased¹². All attributes for the bottlenose dolphin feature of the Moray Firth SAC were met, and the condition status was revised to 'Favourable (recovered)'. The monitoring of the population has certainly been facilitated by the SAC which has ensured funding for the necessary research¹³.

Case Study S.1.3 (i): ASCOBANS¹⁴ monitoring

There has been limited compliance with the Habitats Directive requirements to monitor the incidental capture and killing of Annex IV species (Article 12) in fisheries or to implement effective conservation measures to prevent bycatch. Whilst monitoring requirements are not specified, given that the stated aim is to 'ensure that incidental capture and killing does not have a significant negative impact on the species concerned', monitoring schemes should at least enable authorities to determine whether or not significant negative impacts are occurring.

In 2014 the ASCOBANS steering group for the conservation plan for the harbour porpoise in the North Sea concluded that:

'except in a few sectors, the level of bycatch monitoring is very low and well below 1%....monitoring conducted by Member States, if any, is at present insufficient for getting a proper evaluation of the extent of bycatch of harbour porpoises in the North Sea at large...Implementation of conservation measures requires formulating explicit conservation and management objectives, which have not been agreed upon at present. There is overall limited compliance to the Habitats Directive requirements amongst Member States with regards to monitoring and assessment of the impact of bycatch on harbour porpoise populations, and consequently implementation of conservation measures as required¹⁵.

This lack of monitoring likely extends to other Annex IV species incidentally bycaught in fisheries and other geographical areas. Member States' approaches to the implementation of strict species protection under Article 12 of the Habitats Directive regarding cetaceans are not leading to specific and enforceable measures to prohibit bycatch¹⁶.

¹¹ Thompson, P.M., Corkrey, R., Lusseau, D., Lusseau, S.M., Quick, N.J., Durban, J.W., Parsons, K.M. & Hammond, P.S. 2006. 'An assessment of the current condition of the Moray Firth bottlenose dolphin population'. Scottish Natural Heritage Commissioned Report No. 175.

¹² Cheney, B., Corkrey, R., Quick, N.J., Janik, V.M., Islas-Villanueva, V., Hammond, P.S., Thompson, P.M. 2012. 'Site condition monitoring of bottlenose dolphins within the Moray Firth Special Area of Conservation: 2008 – 2010'. Scottish natural Heritage Commissioned Report No. 512.

¹³ Lusseau, D. 2013. 'The cumulative effects of development at three ports in the Moray Firth on the bottlenose dolphin interest of the special area of conservation'. A report to marine Scotland. 30pp.

¹⁴ Agreement on the Conservation of Small Cetaceans in the Baltic, North East Atlantic, Irish and North Seas

¹⁵ http://www.ascobans.org/sites/default/files/document/ASCOBANS_NSG4_Report.pdf

¹⁶ Born et al. 2014. 'The Habitats Directive in its EU Environmental Context: European Nature's Best Hope?'. Routledge.

CASE STUDY S.1.3 (ii): Effective fisheries management in English European Marine Sites

Fishing activities can have a significant effect on the protected features of the 216 UK SACs and SPAs (together European Marine Sites or EMS)¹⁷, and therefore need to be managed in compliance with Article 6 of the Habitats Directive¹⁸. Until 2014, fishing in EMS was not systematically regulated, resulting in damage to vulnerable sites and features on a regular basis¹⁹. Over the past decade, damaging fishing (dredgers and trawlers) operated in the Inner Dousing (Lincolnshire)²⁰, Wash, Eddystone, Lyme Bay²¹, Falmouth and Berwickshire and North Northumberland European Marine Sites in England. Cardigan Bay and Pembrokeshire Marine SACs in Wales have also been badly affected²².

For a number of years, the Marine Conservation Society and Client Earth collected and provided to the UK government scientific and legal evidence showing that the UK was in breach of Article 6(2) and 6(3) in allowing potentially damaging fishing activities to continue in SACs and SPAs without ensuring that no damage was taking place (through carrying out Appropriate Assessments (AA) under Article 6(3) or taking relevant measures under Article 6(2))²³.

It is anticipated that all inshore sites in England will be appropriately managed by the end of 2016²⁴. Similar measures are being discussed in Northern Ireland, and Scotland is currently setting management measures for its most vulnerable 9 inshore SACs. Wales has adopted an approach of managing one fishery (scallop dredging), whilst considering other potentially damaging fishing not to require assessment or management at present (it therefore still needs to improve some fisheries management in some EMS).

Some aspects of the intended management regime may still need to be improved in order to ensure the proper implementation of the Habitats Directive, for example with regard to the management of mobile and ephemeral features of SACs²⁵. Mobile species, for example, are not subject to the Scottish consultations on management measures.

In relation to off-shore sites (12 nautical miles (nm) – 200nm offshore), more delays are to be expected, as the UK Government is consulting with other EU Member States, which may be affected, and applying the procedure set out in Article 11 of the Common Fisheries Policy basic regulation (Regulation 1380/2013). Gaining consensus from other Member States before proceeding with management is resulting in areas to be managed being determined more by consensual politics rather than science, at the expense of habitat protection²⁶.

¹⁷ <http://ec.europa.eu/environment/nature/natura2000/marine/docs/Fisheries%20interactions.pdf>

¹⁸ Specifically Article 6(2) and 6(3).

¹⁹ Solandt JL, Appleby T and M. Hoskin (2013) Up Frenchmans Creek: A case study on managing commercial fishing in an English Special Area of Conservation. *Env Law and Management* 25(4) 133.

²⁰ http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCIQFjAA&url=http%3A%2F%2Fwww.ywt.org.uk%2Fsites%2Fdefault%2Ffiles%2F130410_scalloping_on_the_yorkshire_coast_summary_ks.pdf&ei=MIT5VMT hEczUojujgdG&usq=AFQjCNFa9mJzy2gaQgzlfiJYOhbJsopQUw&bvm=bv.87611401.d.d24

²¹ <http://www.dorsetwildlifetrust.org.uk/marine-life-returns>

²² <http://news.bbc.co.uk/1/hi/wales/mid/8498868.stm>

²³ Copy correspondence is available from MCS (Jean-Luc.Solandt@mcsuk.org) and ClientEarth (sluk@clientearth.org) on request.

²⁴ <https://www.gov.uk/government/collections/fisheries-in-european-marine-sites-implementation-group>

²⁵ <http://www.clientearth.org/reports/20150108-Revised-approach-to-fishing-in-European-Marine-Sites-a-status-report-December-2014.pdf>

²⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/345970/REVISED_APPROACH_Policy_and_Delivery.pdf

CASE STUDY S.1.3 (iii): Important Plant Areas

Application of Plantlife's Important Plant Area (IPA) methodology in the UK has led to the identification of 161 IPAs, covering 1,657,462 ha or approximately 7% of the UK. IPAs often overlap with SACs as they signify the presence on a site of one or more of the following: outstanding botanical richness, internationally threatened species and internationally threatened habitats. Plantlife has been actively raising awareness of these ecologically important sites and habitats and encouraging their long-term protection and restoration through the adoption of an 'ecosystem-based' conservation approach. Plantlife has worked with partners in numerous IPAs to ensure core IPA features are effectively managed. This involves working with land managers to plant-proof local conservation plans, advising on and undertaking habitat restoration, developing site management best practice 'toolkits' for sustaining wild plant conservation in the long term, and recruiting and training volunteers from local communities to play an active part in the success of an IPA. This approach has delivered some significant outcomes for wild plants and will help deliver full implementation of the Habitats Directive by reaching favourable conservation status of the habitats and plant populations within the SACs.

Examples

Kenfig SAC and IPA

At 7.8 km², Kenfig SAC & IPA covers one of Wales' largest sand-dune sites. It is of special interest for its extensive sand dune habitats and standing waters, together with a mixture of habitats including saltmarsh, intertidal areas, swamp, woodland and scrub. Like many other dunes, Kenfig has become stabilised and overgrown with coarse vegetation due to natural and human factors. Numbers of dune fen orchid (*Liparis loeselii*) an Annex II species, found only at Kenfig, have dropped from ca. 21,000 to just 400 since 1990. Many other rarities are in also sharp decline. Plantlife, Natural Resources Wales and Bridgend County Borough Council are attempting a bold programme of dune restoration, excavating large areas to funnel south-westerly winds across newly exposed sand, kick-starting the natural processes of duneland erosion. In these and other excavated areas many rare species, including sea stock *Matthiola incana*, petalwort *Petalophyllum ralfsii* and even fen orchid have returned, encouraging site managers to undertake similar work at other dune sites.

Brecklands SAC & IPA

The Brecklands SAC & IPA covers an area of roughly 1,119 km², composed of a range of habitats from naturally-fluctuating mires, valley fens and chalk rivers to various types of woodland. Botanical interest lies mainly in the Breckland dry grass heaths (Annex I habitats: H4030 European Dry Heaths, H6210 Semi-natural dry grasslands and scrubland facies) with their distinctive and rare plants. The Brecklands SAC & IPA contains one of the most extensive areas of lowland heath remaining in Britain. Plantlife has implemented a variety of experimental management techniques to promote the early-succession habitats. Following positive responses to management, Plantlife launched a new project in 2013 to restore one of the best known sites. This work allows demonstration of novel management techniques to other land managers and thereby catalyses action at other sites.

CASE STUDY S.2 (i): Protecting pollinators

Target 2 of Biodiversity 2020 aims to maintain and restore ecosystem services. Pollination by insects is a crucial service provided by nature. Research in the UK²⁷ suggests it would cost UK farmers at least £1.8bn a year to replace the crop pollination services provided for free by bees. Although additional habitat creation will be vital in the reversal of bee decline, it is also clear that SACs are playing a vital important role in maintaining different bee species and populations.

²⁷ <http://www.foe.co.uk/sites/default/files/downloads/beesreport.pdf>

The research highlighted the importance of the protection granted by the Habitats and Birds Directives in maintaining bee habitat. Important habitats for bees that had a lower tier of designation (such as a national nature reserve or local wildlife site) had much more limited protection and that many such sites had been lost or damaged resulting in loss of crucial bee habitat. In particular the report raised concerns about the 'proportion of both upland and lowland meadows which are not contained within any form of designated sites, leaving them vulnerable to neglect or inappropriate management'. The authors state that 'By contrast, as an EU priority habitat under the Habitats Directive, Lowland heath has received strong investment in management and protection, achieving or set to achieve, all five UK Biodiversity Action Plan targets set, including expanding the total coverage and increasing the number of patches >30 ha'.

In a further report²⁸ the University of Reading found that SAC sites in the UK are of crucial importance for rare bee species. For example the Sea-aster mining bee depends upon saltmarsh habitat which is a protected under the Habitats Directive. The scabious bee is confined to restricted areas of habitat including the grasslands of Salisbury Plain SAC which support relatively high numbers of the bee due to appropriate habitat and management. The UK and Ireland is home to around 50% of the global population of the Northern colletes bee. Pollinator scientists stress the importance of habitats in Northern Ireland for this bee and comment on the importance of most of this habitat being protected by SAC designations. However the approval of a golf course on part of the North Antrim Coast SAC highlights the imperative for strong and consistent implementation of the Nature Directives.

CASE STUDY S.2 (ii): Protecting non-target bee species

A recent assessment of the status of wild bees in Europe by the IUCN has stressed the importance of protected sites in helping to prevent further loss of bee species. The report found that nearly one in ten wild bee species face extinction in Europe, largely due to changing agricultural practices and increased farming intensification that have led to large-scale losses and degradation of bee habitats.

The IUCN's report found that N2000 sites are crucial for rare bee species even if they had not been designated on the basis of their importance to particular bee species:

'The Natura 2000 network of protected areas almost covers 18% of the EU territory (IEEP 2011). Many rare and scarce species are only found within these sites (e.g., Iserbyt 2009). They have been lost from the wider landscapes and so protected areas provide an essential tool in conservation even if these sites were never designated based on the presence of particular bee species. The results of the Red List assessment indicate that 30 threatened species and 41 Near Threatened species were recorded in at least one protected area'

The IUCN's policy recommendations included to:

'Increase the protection of habitats supporting high bee diversity and endemism, and also those that act as source habitats for bees, with particular focus on Mediterranean and montane areas and species-rich grasslands.'

The importance of protecting, restoring and increasing bee habitat is confirmed by the stark findings of the research. This first-ever assessment of all European wild bee species shows that 9.2% are threatened with extinction, while 5.2% are considered likely to be threatened in the near future. A total of 56.7% of the species are classified as Data Deficient, as lack of experts, data and funding has made it impossible to evaluate their extinction risk²⁹.

²⁸ http://www.foe.co.uk/sites/default/files/downloads/bees_ionic_bees_report.pdf

²⁹ http://ec.europa.eu/environment/nature/conservation/species/redlist/downloads/European_bees.pdf

Case Study S.3 (i): IBAs³⁰

BirdLife's Important Bird and Biodiversity Area (IBA) Programme aims to identify, monitor and protect a global network of IBAs for the conservation of the world's birds and other wildlife. BirdLife Partners take responsibility for the IBA Programme nationally, with the BirdLife Secretariat taking the lead on international aspects and in some priority non-Partner countries. Using a set of standardised selection criteria, more than 12,000 IBAs have been identified in over 200 countries and territories globally.

Birds have been shown to be effective indicators of biodiversity in other animal groups and plants – especially when used to define a set of sites for conservation. So although the IBA network is defined by its bird fauna, the conservation of these sites would ensure the survival of a correspondingly large number of other animals and plants.

The European IBA Programme is the longest running of BirdLife's regional IBA Programmes. It now covers more than 4,000 sites, monitored by more than 2,000 local volunteers (also known as 'caretakers') and supported by regional and national IBA coordinators in more than 40 European countries.

In Europe, the selection criteria for IBAs were deliberately aligned with SPA selection criteria (Grimmett and Jones 1989³¹, Heath and Evans 2000³²). Consequently, the value of BirdLife's IBA inventory as a 'shadow list' of SPAs has repeatedly been recognised by the European Court of Justice and the European Commission in a series of cases brought against Member States for failure to designate sufficient SPAs. In Europe the IBA criteria also take into account the requirements of regional conservation treaties, such as the Emerald Network under the Bern Convention, the Helsinki Convention and the Barcelona Convention.

This has helped to bring about a dramatic increase in the total area of IBAs designated as SPAs, from 23% in 1993 to 67% (47 million hectares) in 2013. This increase is even more impressive when one considers that the total number of IBAs has doubled over the same period, reflecting the ongoing expansion of the EU and the growing number of Member States obliged to protect key sites for birds. However, one third of the total land area of IBAs in the EU remains undesignated, and much remains to be done to identify and protect important marine areas.

Case Study S.3 (ii): Volunteer advice saves bats

Natural England, through its network of Volunteer Bat Roost Visitors, provides free advice to homeowners and churches that need to do minor works on their buildings or who are experiencing issues as a result of a bat roost being present in the building. Examples of where this free advice and work by volunteers has helped to resolve the issues in churches can be found online³³. In some cases the presence of the bats is being used to teach children and other visitors about wildlife and biodiversity.

In addition to this, Natural England, the Bat Conservation Trust, Church Buildings Council, English Heritage and others are working in partnership to build on research already undertaken to identify issues and evidence gaps, find solutions and are seeking external funding to help develop this project. Information on previous research can also be found online³⁴ and the full report is also available on the Defra website³⁵.

³⁰ BirdLife International (2013) Designating Special Protection Areas in the European Union. Presented as part of the BirdLife State of the world's birds website. Available from: <http://www.birdlife.org/datazone/sowb/casestudy/244>

³¹ http://books.google.co.uk/books/about/Important_bird_areas_in_Europe.html?id=dsrwAAAAMAJ&redir_esc=y

³² Heath, M. F. and Evans, M. I., eds (2000) Important Bird Areas in Europe: priority sites for conservation. Cambridge, UK: BirdLife International.

³³ http://www.bats.org.uk/pages/church_case_studies.html

³⁴ <http://www.batsandchurches.org.uk>

CASE STUDY S.3 (iii): The success of the Habitats Directive in driving positive change

In 2012, the UK government recognised that the UK was in breach of Article 6 of the Habitats Directive, and set up an 'Implementation Group' to implement a new approach to managing fisheries in European Marine Sites. The role of the group was to develop a red/amber/green matrix that identified the most vulnerable sites, features and fishing gear interactions with input from national scientists, NGOs, and the relevant fisheries regulators.

The most vulnerable 'reds' were managed on a priority basis: By the end of 2014, 17 byelaws had been passed to implement new management regimes in 25 highly vulnerable inshore sites to systematically prohibit damaging activities to protect the features for which the sites were designated³⁶. By the end of 2016 AAs will be carried out to identify management measures for the remaining 'amber' SACs and SPAs feature and gear interactions.

Already, before the end date of 2016, the Habitats Directive has led to much higher levels of protection of many marine SACs and SPAs, whilst allowing Low Impact (such as potting and netting) fishing to continue in biodiverse inshore sites. To date, the process has been successful in achieving change in the regulatory regime of protection within 'high risk' EU marine sites, with over 5,680 km² of seabed finally protected in 24 (predominantly coastal) sites. A further 191 sites (SPAs and SACs) are still under some threat in adjacent waters, but there are moves within the Scottish government to enact similar local laws to systematically prevent any trawling or dredging damage in 9 sites.

A strong contributing factor to this success was using a multi-disciplinary approach, both in the initial stages through the use of a combination of scientific and legal expertise, and from 2012 through the multi-disciplinary implementation group, which includes regulators, central government, industry and NGO representatives³⁷. Liaison and management discussion continues between NGOs, regulators and fishers to ensure the results of the work are sustainable, long-term, and adequately understood.

³⁵

<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=17863&FromSearch=Y&Publisher=1&SearchText=wm0322&SortString=ProjectCode&SortOrder=Asc&Paging=10%23Description>

³⁶ Map available from Marine Conservation Society (Jean-Luc.Solandt@mcsuk.org).

³⁷ <http://www.blog.clientearth.org/new-byelaws-prohibiting-damaging-fishing-in-european-marine-sites/>

CASE STUDY S.3 (iv): Dibden Bay

In 1996 Associated British Ports (ABP) proposed a new container port development in Dibden Bay, Southampton Water, Hampshire, that would require a large intertidal and subtidal marine dredge.

This development would have destroyed 76ha of intertidal mudflat (including direct loss of 42ha within the boundaries of the then Solent and Southampton Water SPA and Ramsar site) and would also have affected the then Solent Maritime cSAC.

Despite this, an initial assessment by ABP concluded that the proposal would not have an adverse effect on the Natura 2000 sites. However this was disputed by, among others, English Nature and the RSPB.

Following a lengthy public inquiry, the Secretary of State (SoS) concluded that there would be no doubt that the proposed development would damage the integrity of the Solent and Southampton Water Ramsar Site and SPA and that it could not be ascertained that the proposed development would not adversely affect the integrity of the Solent Maritime cSAC.

Since the decision there has been much closer working between Natural England, the RSPB and ABP (including to enable other development at Southampton), as well as the ports industry in general. Potential problems have been resolved and development allowed when the Habitats Regulations decision making process is used properly. More detail can be found under case study 16 in the RSPB's 2nd Submission to the Habitats Regulations Review³⁸.

CASE STUDY S.3 (v): Immingham Outer Harbour, Humber Estuary

Immingham Outer Harbour is a case that progressed smoothly through the consenting process because ABP fully engaged with the Habitats Regulations process at an early stage. The port is now operating, and the habitat compensation necessary to offset unavoidable damage associated with its construction has been provided.

The port company proposed extending the Humber International Terminal to create a new roll-on, roll-off ferry terminal, which would have caused direct loss of 22ha of intertidal mud within an area proposed as an extension to what is now the Humber Estuary SPA and SAC. In discussion with the Environment Agency, English Nature, Lincolnshire Wildlife Trust and the RSPB, the port accepted that there would be an adverse effect on the integrity of the site, and entered into a legal agreement with the conservation organisations to provide adequate compensation to maintain the integrity of the network.

In parallel to the due process, conservation organisations worked with ABP to identify potential sites for compensation and negotiate with land owners and put forward planning applications for the compensation sites. ABP also produced the necessary information to inform the Government's consideration of alternative solutions, and imperative reasons of overriding public interest. This allowed the nature conservation bodies to withdraw their objections to the scheme and so avoid an unnecessary and costly public inquiry. More detail can be found under case study 29 in the RSPB's 2nd Submission to the Habitats Regulations Review³⁹.

³⁸ http://www.rspb.org.uk/Images/rspb2ndsubmissiontodefrahrcasestudycommentaryandanalysis_tcm9-305620.pdf

³⁹ http://www.rspb.org.uk/Images/rspb2ndsubmissiontodefrahrcasestudycommentaryandanalysis_tcm9-305620.pdf

Case Study S.3 (vi): LIFE funding for SACs

LIFE funding for the UK Marine SACs Project in 1990s was a tremendous support and only thing that got management off the ground! Its activities focused on establishing management schemes at twelve marine SACs around the UK and on developing specific areas of knowledge needed for the management and monitoring of European marine sites⁴⁰.

Case Study S.3 (vii): RSPB LIFE projects

The RSPB has been involved in well over 30 LIFE projects, as Coordinating or Associated Beneficiary. Among those it has led since 2000 are:

Title: Restoring active blanket bog of European importance in North Scotland⁴¹ and Wales⁴²

Ref: LIFE00 NAT/UK/7075 / LIFE06 NAT/UK/134

Active blanket bog is a starred (i.e. top-priority) habitat under the Habitats Directive. These projects restored more than 22,000 ha.

Title: Developing a strategic network of SPA reedbeds for *Botaurus stellaris*⁴³

Ref: LIFE02 NAT/UK/8527

Bittern is listed in Annex I of the Birds Directive and is a top priority for funding through LIFE. This project optimised eight existing SPAs and created the right conditions for re-colonisation at a further 11.

Title: Tackling climate change-related threats to an important coastal SPA in eastern England⁴⁴

Ref: LIFE07 NAT/UK/938

This was a managed realignment project to protect the vital freshwater habitats at the RSPB's Titchwell reserve – a key component of the North Norfolk Coast SPA.

Title: Conserving machair habitats and species in a suite of Scottish Natura sites⁴⁵

Ref: LIFE08 NAT/UK/204

Machair is listed in Annex I of the Habitats Directive. This project aimed to protect and restore it throughout western Scotland, which holds approx 70% of the world total.

Case Study S.3 (viii): Wallasea / Crossrail project

The Wallasea Island Wild Coast project was conceived as a habitat restoration project to create 465ha of intertidal habitat behind currently unsustainable sea defences. Fulfilling the requirement of the Habitats Directive to compensate for the loss of existing designated intertidal habitat was a key driver for this project.

In early 2008, RSPB were approached by the developers of Crossrail, a British project to build major new railway connections under central London, who were seeking a beneficiary to reuse the clean spoil from their tunnelling. Agreement was reached that excavated material from Crossrail would be

⁴⁰ <http://www.ukmarinesac.org.uk/project-background.htm>

⁴¹ <http://www.lifepeatlandsproject.com/>

⁴² http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3152&docType=pdf

⁴³ http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.createPage&s_ref=LIFE02%20NAT/UK/008527&area=1&yr=2002&n_proj_id=1971&cfid=424487&cftoken=220d6689dba6dc6d-95FE42FC-B69C-02BF-78DA30B0FA331B26&mode=print&menu=false%27%29

⁴⁴ <http://www.rspb.org.uk/whatwedo/projects/details/262957-titchwell-marsh-coastal-change-project>

⁴⁵ <http://www.machairlife.org.uk/>

used to raise existing land levels and create further raised areas within the existing island sea walls.

This solution has saved Crossrail money, because they were able to find a local, environmentally sustainable site to take around 4.5 million tonnes of excavated material, which they might otherwise have had to dispose of at significant extra cost. Movement of the excavated material by freight train and ship will also reduce the impact of Crossrail's construction on London.

The new habitats created through this project will support a stunning array of nationally and internationally important bird populations, as well as a host of other wildlife. The Wallasea Project will also act as a carbon sink. Recent calculations have estimated that the carbon storage value of Wallasea Island when completed will be £8.82 million over 50 years⁴⁶.

In addition the project has saved the money that would have been spent on further shoring up Wallasea's sea wall to protect the low-lying land against sea level rise, by delivering a sustainable solution to long-term coastal realignment.

CASE STUDY S.3 (ix): Sustainable Catchment and Management Planning (SCaMP)

The SCaMP implemented on Garron Plateau SAC is the result of a successful partnership between RSPB, NI Water, NIEA and local farmers. The 2,000ha project area surrounds the Dungonnell drinking water reservoir. The peatland habitat was in declining condition due to unsuitable grazing and historic drainage ditches were drying out the peat and acting as conduits for peat washing into the reservoir, discolouring the water. NI Water have to treat the water at considerable expense to remove the suspended and dissolved peat.

Through the SCaMP project, an appropriate grazing regime was agreed with the local farmers and the drainage channels were blocked. By blocking the drainage channels the water levels rise to rewet the peat. This both prevents further peat erosion and encourages the growth of peat forming vegetation, improving and restoring the SAC habitat. It also reduces the suspended and dissolved solids entering the reservoir and helps control a steady water supply, thereby directly reducing NI Water treatment and supply costs. Since completing the project, NI Water have stated that they intend to implement SCaMP across their reservoir catchments across Northern Ireland, many of which are within or adjoin Natura 2000 sites.

- RSPB had targeted the site *as it is part of the Natura 2000 network* and was in declining condition.
- The Garron work cost £21,000 and was completed in four months.
- Although still at an early stage of monitoring, there are indications of an immediate positive impact on water quality.
- An outcome from the work at Garron Plateau SAC is the implementation of SCaMP in other catchments by NI Water.

The SCaMP project supports the delivery of UK Biodiversity Action Plan targets as well as Water Framework Directive targets for river water quality. It is a perfect example of how alignment between the objectives of the Water Framework Directive and Habitats Directive facilitates win-win solutions for water quality and biodiversity.

⁴⁶ This uses the latest government figures for the price of carbon: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/245385/6667-update-short-term-traded-carbon-values-for-uk-publ.pdf, and a carbon sequestration rate of 2.1 tonnes per hectare per year, taken from the UNEP report on Blue Carbon 2009.

Case Study S.3 (x): Financing for nature conservation in Northern Ireland

Ulster Wildlife (UW) believes that funding is the main factor standing in the way of achieving the Directive's objectives. Why? Because it is accepted that current funding within the UK is insufficient to achieve the current goals and targets: most importantly, those targets relating to the achievement of the EU Biodiversity Strategy, which themselves devolve from the global Nagoya Protocol and its Aichi targets under CBD. And yet, it is apparent that there is considerable funding available from the current EU budget which is not being drawn down by the UK and EU funds received by the UK for structural programmes could be more effectively allocated to deliver environmental outcomes.

UW believes the opportunity to draw down considerable European funding to compensate for the UK stringency cuts, which are disproportionately impacting on the natural environment, is not being undertaken in a structured manner and thus not realising the potential of the Directives to ensuring biodiversity and achieving the EU Biodiversity Strategy Objectives and Targets. Thus it can be predicted now that these objectives and targets will not be achieved by Northern Ireland (NI) with the current funding levels – NI government and non-government agencies are barely able to keep their organisations running let alone achieving environmental outcomes.

Case Study S.3 (xi): Bats

Suffolk – On the basis of an initial bat survey, undertaken in summer, planning permission was granted for the demolition of a house, with a new build designed to accommodate a disabled family member. The consultant had not mentioned the need for summer bat activity surveys and, in the absence of a local authority ecologist to pick this up, none were undertaken. The applicant approached a different consultancy in winter to prepare the licence application. The roost was of very small numbers of common species and there was ample space in unaffected buildings on the site to provide mitigation for any building-roosting species. Full activity surveys were required for the licence application, delaying the start of work until the following autumn. Inexperienced staff leading to the process being poorly applied and causing delays.

Devon – A small lesser horseshoe bat night roost was repaired under a European protected species (EPS) mitigation licence. One of the licence conditions was for a management plan requiring on-going visits for many years, almost doubling the cost of the licence. Inexperienced staff leading to unnecessarily burdensome requests.

Case Study S.3 (xii): Inconsistent application of derogations

Implementation relating to derogations from protective legislation has been inconsistently applied across Member States and species, such as cormorants. Although the cormorant is protected across the EU by the Birds Directive, management of conflicts between cormorants and fisheries is dealt with on a national scale by different Member States. In France, management plans allow large-scale culling, whereas in other countries shooting allowances are allocated to specific sites (e.g. Sweden, Poland, Italy, Denmark), dates (e.g. Romania, Estonia), or quotas (e.g. UK). In the Netherlands, however, the cormorant is not seen as a problem due to the high importance put on nature conservation, and killing or disturbing the bird is illegal at all times. Dutch anglers accept cormorants as part of the natural ecosystem, and work closely with conservation organisations on ecological measures (e.g. habitat management) to solve any local conflicts⁴⁷.

⁴⁷ Engelen, E., Keulartz, J., & Leistra, G. (2008). 'European nature conservation policy making'. In 'Legitimacy In European Nature Conservation Policy' (pp. 3-21). Springer Netherlands

Case Study S.3 (xiii): Talbot Heath housing proposal

A developer proposed a large mixed use development on farmland, including dwellings, roads and open space adjacent to the Dorset Heathlands SPA and the Dorset Heaths SAC. This part of the SPA/SAC suffered from a variety of impacts associated with its location next to a major urban settlement, including recreational disturbance, arson, litter and invasive species.

The appropriate assessment (AA) carried out by the local authority adopted the current poor condition of the site as a baseline for the assessment, and focused on the impacts of the scheme on this small part of the SPA in its present state rather than the impacts on the overall integrity of the entire SPA. It also treated impacts on less than 1% of the bird population of the SPA as minor and not of concern, but advanced no reasons to justify the selection of this level. The AA concluded that with mitigation the scheme would not harm the SPA or SAC.

The RSPB, working with Natural England, objected to the proposal, and following a public inquiry, the Secretary of State (SoS) refused planning permission for the proposal due to the scheme's likely impacts on the SPA amongst other reasons. The SoS made it clear that the AA should have taken account of the potential for restoration of the site to favourable conservation status rather than the current poor condition of the site.

Case Study S.3 (xiv): Northern Ireland Environment Agency

In Northern Ireland, there needs to be a step change in cohesion within and between government departments as all Member State governments' agencies and departments are bound by environmental legislation. This may, ironically, be improved by the forthcoming amalgamation of the NI Departments of Environment and Agriculture (which includes marine fisheries).

In Great Britain, the statutory nature conservation agencies (for England, Scotland and Wales) are independent of Government and are thus free to criticise Government policies and decisions. By contrast, the Northern Ireland Environment Agency (NIEA) and the Marine Division (MD) are within the Department of the Environment and are thus constrained by the code of conduct for civil servants which preclude criticism of Ministerial or Departmental policies and decisions. In NI, this has stood in the way of acting and providing information and advice strictly in full compliance with the obligations of European legislation.

Case Study S.3 (xv): Unauthorised mineral extraction from Lough Neagh SPA ⁴⁸.

This case highlights the need for better implementation of the Directives and for the Commission to take a more proactive role in pursuing Governments for failure to enforce the laws. It is a failure of political will not a failure of the legislation.

Situated in the centre of Northern Ireland, Lough Neagh is the largest lake in the UK. It supports internationally important numbers of wintering whooper swans and nationally important numbers of breeding common tern and over 20,000 of a variety of species of waterfowl in winter. In the late 1980s and early 1990s Lough Neagh is recorded as hosting in excess of 100,000 waterbirds. However, by the winter of 2003/04 these populations had declined dramatically. Some of the species protected under the Birds Directive, and for which the lough was designated a SPA in 1998, suffered particularly badly. This included a decline of 80% of pochard (40,000 to 8,000), 71% of goldeneye (14,000 to 4,000), 70% of tufted duck (30,000 to 9,000) and 48% of scaup (5,000 to 2,600).

Unauthorised mineral extraction has been undertaken on a significant scale at Lough Neagh since it was designated as a SPA. It is estimated that Lough Neagh provides some 20-25% of Northern Ireland's annual sand production and has been at up to 1.7 million tonnes per annum. Yet there is no Habitat Regulations Assessment or Environmental Impact Assessment for this activity. This is not due a failure in the provisions of the Directives but because the department responsible for environmental protection in Northern Ireland has repeatedly and persistently neglected to bring this unregulated extraction activity under planning control. Answers to questions in the NI Assembly show that decisions have been taken in the past not to pursue enforcement action.

Despite officials having opened an enforcement case in March and issued warning letters between 25 September and 10 October 2014 (sixteen years after Lough Neagh became a SPA) advising the operators to cease unauthorised extraction, the unauthorised activities have continued.

Case Study S.3 (xvi): 24th and 25th licensing rounds and SACs

In January 2006, the Government announced the 24th oil and gas licensing round, following Strategic Environmental Assessment (SEA) 6, which covered the Irish Sea. The SEA catalogued the significant, and in some areas international, importance of the area for wildlife, especially for birds and cetaceans. The then Department for Trade and Industry (DTI) decided that no areas should be off limits for fossil fuel extraction including the SACs.

If any plan or programme, such as oil licensing, is likely to affect a European protected site – SAC or SPA – an AA is required under the Habitats and Species Directive (Directive 94/43/EEC). An AA of the 24th round was carried out by the DTI. This assessment did not guarantee the protection of protected sites, and according to the Countryside Council for Wales, it failed to establish 'with sufficient robustness or certainty that the plan will not have an adverse effect on the integrity of any European Site or potential European Sites⁴⁹.

Licensing went ahead with a temporary embargo on the blocks within or immediately adjacent to the Moray Firth and Cardigan Bay SACs. A second Assessment was then undertaken.

The 25th licensing round was announced early in 2008 and brought unprecedentedly vast areas of sea under offer. With respect to the UK's bottlenose dolphin SACs: (i) in mid-Cardigan Bay; (ii) north Cardigan Bay (Pen Llŷn a'r Sarnau) and (iii) the inner Moray Firth, following AA, the first was excluded from the 24th and 25th licensing rounds; the second was included within the 25th round; and the third

⁴⁸ <http://www.irishenvironment.com/commentary/dean-blackwood-turning-blind-eye-potential-environmental-damage-lough-neagh-special-protection-area/>

⁴⁹ CCW, 2006. Letter from Keith Davies, Acting Head of Policy at CCW (Countryside Council for Wales) to Welsh Assembly Government sent 10th Nov 2006.

(core habitat for a small and isolated population) was subject to a second AA. These concluded that Cardigan Bay SAC should be excluded from licensing due to lack of knowledge about the possible impacts on dolphins. In 2012, the 27th round was announced. Cardigan Bay SAC remained excluded from licensing, but the Pen Llŷn a'r Sarnau SAC was opened to oil companies.

Case Study S.3 (xvii): Inadequate penalties for knowing destruction of bat roosts

In August 2013 a case was heard in Bridlington magistrates' court. A developer pleaded guilty and was convicted of six charges of destruction of bat roosts after demolishing six buildings, knowingly destroying brown long-eared bat, whiskered bat and pipistrelle roost sites. Despite this clear admission of guilt, the conviction was marred by the penalty. On each charge the fine was £35 per roost destroyed (a total of £210) with a victim surcharge of £20 and costs of £85.

Case Study S.3 (xviii): New approach to wildlife crime penalties?

This case heard how Hargurdial Singh Rai, 55, of Birmingham-based ISAR Enterprises Ltd, went ahead with the redevelopment of former offices on Dale Road despite a survey⁵⁰ which identified the site as a resting place for brown, long-eared bats.

The Magistrates found Rai guilty of destroying the resting place of a protected species and in a ground breaking decision the court, instead of imposing a sentence on Mr Rai and Isar Enterprises have referred the case to Derby Crown Court in order that consideration can be given to confiscating assets belonging to the offenders equivalent to the amount saved by not following lawful processes.

Case Study S.4 (i): Monitoring of bottlenose dolphin in the Moray Firth SAC

In the Moray Firth SAC, monitoring of the population of bottlenose dolphin has been facilitated by the SAC which has ensured funding for the necessary research. SAC designation also brings with it an additional level of environmental assessment that has been effective at assessing potential impacts and in some cases requiring additional mitigation and/or monitoring. The designation has enabled a focused approach in the management of some activities that may cause pressures resulting in significant effects and subsequent population impacts. It also enabled the development of tools that may allow better assessment of pressures, for example the interim population consequences of disturbance (PCoD) model. The interim PCoD model was specifically built to assess the impacts of offshore renewable energy development on UK marine mammals. It has been designed to use the kinds of information that are likely to be provided by developers in their environmental statements and Habitats Regulations Assessments. The model is freely available and allows the user to predict the population consequences of disturbance and injury on five key priority species of marine mammal found in the UK⁵¹. A practical example of its application can be found in the assessment of potential impacts of the expansion of a number of ports and harbour associated with the development of wind farms, alongside the existing commercial dolphin-watching industry on the dolphin population in the Moray Firth SAC⁵².

⁵⁰ <http://www.ripleyandheanornews.co.uk/news/local/developer-destroyed-bat-resting-place-1-6587970>

⁵¹ <http://www.gov.scot/Resource/0044/00443360.pdf>

⁵² Lusseau, D. 2013. The cumulative effects of development at three ports in the Moray Firth on the bottlenose dolphin interest of the special area of conservation. A report to marine Scotland. 30pp.

Case Study S.4 (ii): UK National Ecosystem Assessment (NEA)⁵³

The UK NEA has provided new information on the changing natural environment in terms of ecosystems and the range of services that ecosystems provide to people. It had 3 objectives:

- To produce an independent and peer-reviewed UK National Ecosystem Assessment for the whole of the UK;
- To raise awareness of the importance of the natural environment to human well-being and economic prosperity;
- To ensure full stakeholder participation and encourage different stakeholders and communities to interact and, in particular, to foster better inter-disciplinary cooperation between natural and social scientists, as well as economists.

Key Messages of the UK NEA (UK NEA 2011a, b).

- The natural world, its biodiversity and its constituent ecosystems are critically important to our well-being and economic prosperity, but are consistently undervalued in conventional economic analyses and decision-making.
- Ecosystems and ecosystem services, and the ways people benefit from them, have changed markedly in the past 60 years, driven by changes in society.
- The UK's ecosystems are currently delivering some services well, but others are still in long-term decline.
- The UK population will continue to grow, and its demands and expectations continue to evolve. This is likely to increase pressures on ecosystem services in a future where climate change will have an accelerating impact both here and in the world at large.
- Actions taken and decisions made now will have consequences far into the future for ecosystems, ecosystem services and human well-being. It is important that these consequences are understood, so that we can make the best possible choices, not just for society now, but also for future generations.
- A move to sustainable development will require an appropriate mix of regulations, technology, financial investment and education, as well as changes in individual and societal behaviour and adoption of a more integrated, rather than the conventional sectoral, approach to ecosystem management.

Case Study S.4 (iii): Regulating fishing in European Marine Sites

Damaging fishing activities in inshore UK European Marine Sites (EMS: SACs and SPAs) are now being regulated or management measures are in the process of being developed.

In England, this is happening in the form of a 'revised approach' to fisheries management in EMS to ensure Article 6 of the Habitats Directive is implemented. 17 byelaws were passed to stop the most potentially damaging fishing activities within the most vulnerable 24 English European Marine Sites (EMS) in 2013/2014. AAs are now being undertaken in relation to other fishing activities that may significantly affect sites (see case study on effective inshore fisheries management in English European Marine Sites below)⁵⁴.

In Scotland, there is now acknowledgement that damaging fishing should not occur in EMS and a first consultation on the necessary measures has taken place, and a second one is to follow, with the intention to introduce the necessary management within the next few years.

⁵³ <http://uknea.unep-wcmc.org>

⁵⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/345970/REVISED_APPROACH_Policy_and_Delivery.pdf; https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/314340/pip.pdf; <http://webarchive.nationalarchives.gov.uk/20140507202222/http://www.marinemangement.org.uk/protecting/conservation/ems.htm>

Case Study S.4 (iv): King scallops in Cardigan Bay

In Wales dredging for King Scallops has been carried out in Cardigan Bay for many years but at a mainly low level. This changed in 2006 when up to 60 scallop dredgers were reported operating in the Bay at one time, including within the boundaries of the Cardigan Bay SAC, and further south in Pembroke Marine SAC. Pressure from within Welsh inshore fishing fleets, eNGOs and politicians resulted in the Wales Scallop Order (2010)⁵⁵ that closed all inshore waters to scallops, whilst allowing boats access to part of one site (Cardigan Bay). The order shows the importance of the Directive in protecting sustainable fishing practices from the most damaging practices that can emerge, whilst protecting the interests of biodiversity and most local inshore Welsh fishermen (who use sustainable pot fishing). In April 2012, two fishing boat owners and a skipper were fined a total of £29,000 for scallop-dredging inside that part of the Cardigan Bay SAC that remains closed to such activity. This was the result of action by a fisheries patrol vessel⁵⁶.

Case Study S.4 (v): Achieving sustainable bat conservation by engaging, educating and involving people in the wonder of bats.

During 4 years (2008-2012), the Count Bat Project led by BCT involved as wide a spectrum of people as possible in bat conservation with members and volunteers reflecting modern Britain.

Over 20,000 people were involved in project events, 1,500 bat sightings were added to the **Big Bat Map**⁵⁷ and over 1,200 hours of volunteer time were generously donated. Although this Heritage Lottery Fund project came to an end in January 2012, BCT produced an end of project resource pack DVD called '**Bats for All**' which has continued to help and inspire a wide range of people in holding events and keeping the spirit of the Count Bat project alive.

Case Study S.4 (vi): Bat Conservation Trust, Built Environment Programme

BCT's Built Environment programme was established in 2007 when the compelling need was identified for a post that worked closely with the built environment sector. By working with the development sector our Built Environment Officer has found solutions to barriers to bats and other building reliant biodiversity being able to continue to share our populated landscapes.

In collaboration with organisations such as the British Standard Institute (BSI) and the Royal Institute of British Architects (RIBA), BCT publishes industry standards and guidance on biodiversity and the built environment that make its consideration easy to incorporate into day to day practice and that brings positives to all involved⁵⁸.

Case Study S.4 (vii): SCANS - II

Requirements to monitor the conservation status of species under article 11 have prompted collaborative initiatives between Member States and fostered collaboration between stakeholders. One example of this is the large-scale surveys undertaken to estimate the abundance of small cetaceans in the European Atlantic and North Sea' (SCANS-II). This project was supported by eleven

⁵⁵ <http://gov.wales/topics/environmentcountryside/fisheries/commercialfishing/scallopfisherywalesno2order10/?lang=en>

⁵⁶ http://www.milfordmercury.co.uk/news/9666273.Court_dishes_out_29_000_in_fines_for_illegal_scalloping/

⁵⁷ <http://www.bigbatmap.org>

⁵⁸ <http://www.ribabookshops.com/item/designing-for-biodiversity-a-technical-guide-for-new-and-existing-buildings-2nd-edition/79859/>

partners in 10 countries and cofinanced by institutions in seven countries, as well as dedicated Life funding⁵⁹.

Case Study S.4 (viii): Dibden Bay and Port of Southampton

The ports sector frequently has to operate within or adjacent to Natura 2000 sites, and is a relatively important component of the UK economy. RSPB's view is that port expansion should be delivered through those options that were least environmentally damaging to new demand. In particular, RSPB argued additional capacity should be supplied through better use of the existing port estate, rather than 'greenfield' expansion wherever possible.

ABP proposed Dibden Bay Container Terminal project (Case Study 16), aimed at expanding the Port of Southampton, but would have destroyed 22ha of protected habitats. Following a public inquiry, the Government accepted the inspector's recommendation that the project should not proceed.

Although seen by many commuters as a major port-wildlife conflict, that ports 'lost', we would argue that the influence of Dibden was far more positive, reinforcing the need for the much closer co-operative working between the port sector and conservation. Dibden also drove the ports sector to explore the potential to increase significantly port productivity through modernisation without causing unacceptable environmental damage.

The story comes full circle with the redevelopment of the Port of Southampton, which has provided the capacity envisaged to be provided by Dibden within the existing Port estate, through the use of 'multi-story' car storage, increasing container stacks from three to five, and altering their orientation and creation of two new quays⁶⁰.

Case Study S.4 (ix): Wallasea / Crossrail project

The Wallasea Island Wild Coast project was conceived as a habitat restoration project to create 465ha of intertidal habitat behind currently unsustainable sea defences. Fulfilling the requirement of the Habitats Directive to compensate for the loss of existing designated intertidal habitat was a key driver for this project.

In early 2008, RSPB were approached by the developers of Crossrail, a British project to build major new railway connections under central London, who were seeking a beneficiary to reuse the clean spoil from their tunnelling. Agreement was reached that excavated material from Crossrail would be used to raise existing land levels and create raised areas within the existing island sea walls.

This solution has saved Crossrail money, because they were able to find a local, environmentally sustainable site to take around 4.5 million tonnes of excavated material. Movement of the excavated material by freight train and ship will also reduce the impact of Crossrail's construction on London.

The new habitats created through this project will support a stunning array of nationally and internationally important bird populations, as well as a host of other wildlife. The Wallasea Project will

⁵⁹

http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=2621&docType=pdf

⁶⁰ http://www.rspb.org.uk/Images/rspb2ndsubmissionofdefrahrrcasestudycommentaryandanalysis_tcm9-305620.pdf P19-20 and Case study 16

also act as a carbon sink. Recent calculations have estimated that the carbon storage value of Wallasea Island when completed will be £8.82 million over 50 years⁶¹.

In addition the project has saved the money that would have been spent on further shoring up Wallasea's sea wall to protect the low-lying land against sea level rise, by delivering a sustainable solution to long-term coastal realignment.

Case Study S.4 (x): Environmental regulation (including the Birds and Habitats Directive) as a driver for cost-saving eco-innovation in the offshore wind industry.

A review of the drivers of 'eco-innovation' in the UK wind energy sector⁶² found that in some cases, regulation has been found to stimulate innovation that entirely offsets the cost of the regulation, catalysing more productive and efficient ways of working. For example, in the offshore wind industry, a number of developers (as part of the Carbon Trust's Offshore Wind Accelerator programme) are conducting trials to test the viability of vibration-assisted installation as an alternative to installing mono-piles through impact driving. This reduces noise emissions when installing turbines into the seabed, thereby lessening the risk of hearing damage to marine mammals, whilst simultaneously rendering installation faster and more cost effective. One commentator from the industry highlighted the role of recent regulations introduced in Germany, which limit underwater noise emissions to 160db at 750m, as a key driver of this innovative installation technique⁶³. In the UK, similar regulations protecting marine species – such as the Offshore Marine Conservation Regulations, which implement the Birds and Habitats Directives – mean that developers are keen to adopt similar installation techniques in order to reduce ecological impact as well as improve installation times. This example of eco-innovation, driven by regulation in one part of the world, has had a positive ripple effect across the industry more widely – both in terms of ecological impact but also in terms of cost savings and efficiency.

Case Study S.4 (xi): RSPB Reserves and Local Economic Impacts

Broadly speaking, the local economic impacts associated with nature reserves can be grouped in to two categories: (i) those associated with managing the reserves (e.g. direct employment of reserve staff, direct reserve expenditure on equipment and other goods and services related to reserve management, spending by volunteers and employees in the local economy); and, (ii) those associated with visitors to the reserve (e.g. tourist spending in the local economy). In general, the largest impacts tend to be associated with visitor spending. A 2011 study conducted by the Royal Society for the Protection of Birds (RSPB) found that the network of over 200 nature reserves managed by the society attracted 2 million visitors in 2009, supporting £66 million of local income and 2000 full-time equivalent (FTE) local jobs. Many of these sites are found in remote locations with limited economic opportunities, and so play a particularly important role in providing income and employment. As well as providing income and employment through nature-based tourism-related spending, the reserve network also stimulates economic activity through direct employment of staff and contracted development work. However, tourism was found to be responsible for the majority of the local economic impacts⁶⁴.

⁶¹ This uses the latest government figures for the price of carbon: http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/valuation/valuation.aspx, and a carbon sequestration rate of 2.1 tonnes per hectare per year, taken from the UNEP report on Blue Carbon 2009.

⁶² Roddis, Philippa (2014) 'Wind energy and wildlife: The role of innovation in addressing the ecological impacts of wind energy'. Unpublished Masters Dissertation, MA Environment, Development and Policy, University of Sussex, UK.

⁶³ Williams, Andrew (2014) 'Vibration installation aims to shake up offshore industry' Offshore Wind Journal, 2nd Quarter, p.32 < <http://content.yudu.com/Library/A2vj9j/OffshoreWindJournal2/resources/34.htm> >

⁶⁴ RSPB. (2011). Natural Foundations: Conservation and Local Employment in the UK http://www.rspb.org.uk/Images/naturalfoundations_tcm9-291148.pdf