

# The EU Referendum and the Environment

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# Abstract

The planned referendum on whether the UK should exit the European Union raises a great many questions about the UK's relationship with the European Union (EU) and the costs and benefits of EU membership. On the negative side we have the centralising, undemocratic tendencies of the Union which have been thrown into the limelight by the Grexit debates. In addition, the worrying trend of prioritising economic growth and business interests is exemplified by the Regulatory Fitness programmes and Transatlantic Trade Partnership negotiations. Yet in the field of environmental policy, perhaps more than in any other area, the EU has had an overwhelmingly positive effect. Through its EU membership the UK government has been required to put in place a host of policies with strict targets that can be legally enforced, and to provide regular publicly available reports upon its performance in relation to those targets. If the UK exits from the EU but remains part of the European Economic Area the huge progress made in improving the UK environment could be lost in the absence of external pressure and auditing from EU actors, whilst the UK would still be subject to a wide range of EU laws but with little influence over their content. A total withdrawal suggests a much wider erosion of environmental policy, which is perhaps the intention of the right within and without of the Conservative Party, but one which risks significant economic damage to the UK.

# Introduction

On 8th May 2015 the Conservatives won a majority in the House of Commons in the general election, and in line with their election manifesto promised to hold a referendum on the UK's membership of the EU by the end of 2017. The referendum bill is expected to become law in autumn 2015, and the question that will be put to British voters is: '*Should the United Kingdom remain a member of the European Union?*' Notably, no further question about what follows in the event of a 'no' vote is provided, yet the scenario of a Brexit is far from straight forward. Should we join the European Economic Area (EEA), thereby remaining as associate members of the European Union? Or should we cut all ties with the European Union (to the extent that it is possible to do so in a globalised world economy)? It doesn't appear as though the UK public are to be asked this question in a referendum, which instead be decided by Westminster politicians, despite its huge significance.

Notwithstanding the valid criticisms levied against the EU at the moment – from a lack of democracy to the prioritisation of economic growth over environmental and human wellbeing - from an environmental perspective there is still a strong case for the answer to the referendum question to be 'Yes'. The EU has played a major and positive role in shaping domestic environmental policy, and should continue to do so in the near future via ambitious climate change targets and the pursuit of a circular economy. EU membership has led to a cleaner UK environment; a healthier population; and provided progressive business actors with the opportunity to shape the green economy at the European level and to pursue the competitive advantages that progressive environmental policies afford. EU membership has also provided the UK with a leadership platform on the European and International level.

If the UK leaves the European Union but joins the European Economic Area (EEA) then we will no longer be subject to some important pieces of environmental regulation including the bathing waters, birds and habitats directives, and will have little say over other key areas of European regulation to which we will nevertheless remain subject, for example pollution controls on industry or rules on product policy. Thus, despite its many shortcomings the EU remains good for our citizens, our environment, our businesses and our global standing.

# What has the EU done for UK Environmental policy?

EU membership has had a profound impact on UK environmental policy. In the 1970s and 80s the UK earned the unattractive reputation for being the 'Dirty Man of Europe'; we had the highest sulphur dioxide emissions in the EU and our seas were akin to open sewers as we pumped human effluent into them as part of the 'dilute and disperse' approach to pollution control (Rose 1990). Policy was dictated by so called 'sound science' with action taken only when incontrovertible damage had been proved, a policy approach that proved so damaging in the case of BSE (Patterson and Gray 2012). Moreover, policy-makers would react to problems only as they emerged, in a fragmented and ad hoc way. Perhaps most damaging though was the voluntaristic approach to regulation adopted with close relationships between policy-makers and those that they sought to regulate. Thus, policies were either implemented but targets were pitiably low, or where targets were breached legal action was rare (Lowe and Carter 1994).

EU membership consequently had a revolutionary effect upon UK environmental policy, primarily through requiring a shift in policy style and goals (e.g. see Jordan 2002; Wurzel 2005). The policies pursued by the so-called 'environmental pioneers', notably Germany, the Netherlands, Denmark, Sweden and Finland have driven up standards within the EU as well as acting to prevent the weakening of environmental policies by less progressive states. The 'Europeanisation' of UK environmental policy has seen a re-organisation of the machinery of government and the introduction of new regulatory agencies such as the national rivers authority<sup>1</sup>, and most importantly the adoption of strict emissions limits with a clear judicial process to support the implementation and enforcement of policy (Jordan 2002). Thus, today many of the most important UK environmental policies and priorities are those that have emerged via the EU. For example, thanks to the EU's bathing water directive we have been obliged to change approaches to sewage treatment and emissions of nitrates and the quality of beaches and bathing waters have improved.<sup>2</sup> Studies have shown that beach cleanliness is a key determining factor in people's choice of beach (McKenna *et al.* 2011; Morgan 1999). Therefore cleaner beaches are more likely to attract visitors and boost

<sup>&</sup>lt;sup>1</sup> Subsequently incorporated into the Environment Agency.

<sup>&</sup>lt;sup>2</sup> <u>http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water</u>

local economies, delivering the classic win-win scenario of improved environmental quality and economic gain.

Our air is also cleaner: thanks to EU legislation such as the air quality framework directive and related 'daughter' directives we have seen our emissions of sulphur dioxide and nitrous oxide fall significantly. Where problems do exist, UK citizens can now rely upon their rights under EU law. For example, the UK government has faced legal action over its failure to meet its obligations under EU air quality regulations to reduce damaging emissions (see Box 1).<sup>3</sup> Without the external pressure and legal avenues afforded by EU membership it is unlikely that policy-makers would make the effort necessary to secure citizens' health, as the reluctance to address air quality in urban centres on grounds of cost testifies.<sup>4</sup> Similarly, one of justifications for the ambitious targets in the climate change act under the UK carbon budgets was that the UK would be required to meet the targets anyway under EU law. Given that the Chancellor, George Osborne stated in 2013 that he does not believe that we should go further than our European partners on climate change,<sup>5</sup> the EU is at least providing some minimum goals towards which the UK must strive.

# Box 1: UK Breaching EU Air Quality Laws

The EU Ambient Air Quality directive (2008/50/EC) sets legally binding limits for major air pollutants including small particulate matter (PM10 and PM2.5) and nitrogen dioxide (NO<sub>2</sub>), which have been linked to respiratory and heart diseases and increased mortality rates. Yet the UK government has been in persistent breach of these European obligations. In 2011 Green law firm ClientEarth took the government to court for failing to meet NO<sub>2</sub> targets in several large urban centres including London. The EU directive requires member states which have failed to meet air quality limits to draw up plans to achieve them in the 'shortest time possible'. However, the UK did not intend to meet the NO<sub>2</sub> targets until after 2030 - 20 years after the original deadline set by the legislation. After four years of legal wrangling the UK Supreme Court ruled in favour of Client Earth's action and has ordered the government to come up with a new plan to meet the air quality limits in a more timely fashion. Here we have a case of the UK government persistently failing to protect the health and well-being of its citizens but being forced to do so thanks to EU legislation.

*Sources:* <u>www.ClientEarth.org</u>; EU Ambient Air Quality Directive (2008/50/EC); World Health Organization (2013)

The EU also provides policies to protect UK wildlife under the Natura 2000, habitats and birds directives which currently oblige the government to provide protected wildlife zones. This area of policy is under assault at the European level with the UK very much in the vanguard of efforts to weaken habitats protection. In 2012 the coalition government launched a review of the habitats and birds directive<sup>6</sup>, prompted by the Chancellor's belief that nature

<sup>&</sup>lt;sup>3</sup> <u>http://www.clientearth.org/201303042129/news/press-releases/uk-government-faces-supreme-court-over-illegal-air-pollution-2129</u>

<sup>&</sup>lt;sup>4</sup> See <u>http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenvaud/1820/182002.htm</u>

<sup>&</sup>lt;sup>5</sup> <u>http://www.theguardian.com/environment/2013/sep/28/climate-change-energy-bills-george-osborne</u>

<sup>&</sup>lt;sup>6</sup> https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/69513/pb13724-habitats-review-report.pdf

protection was placing a ridiculous burden upon UK businesses<sup>7</sup>, and despite the fact that the review demonstrated that this claim was unfounded,<sup>8</sup> the government has been pressing for a review of the legislation at the European level as part of the Regulatory Fitness and Performance Programme.<sup>9</sup> Yet, it is now well established that natural ecosystems provide a range of services in the form of flood defences, carbon sequestration, pollination, food, water and materials. Moreover, there are wider mental and physical health benefits to be wrought from maintaining natural spaces (Barton and Pretty 2010), for example, those who live within 500 m of accessible green space are 24% per cent more likely to meet recommended levels of physical activity, potentially reducing morbidity and mortality rates (Lawton et al. 2010). Nature protection is also popular with UK citizens. In recent surveys, 92% of respondents said it was fairly or very important for them to have public gardens, parks, commons or other green spaces nearby<sup>10</sup>; 79% thought domestic biodiversity loss was a very or fairly serious problem, 47% agreed that economic development that damaged protected areas should be prohibited and 45% said that such developments should only be allowed if they were of major public interest and if damage were fully compensated.<sup>11</sup> The popularity of the UK's natural spaces is further reflected in high membership of nature organisations, and generates revenue through tourists attracted to the many beautiful and as yet unspoilt areas to be found within the United Kingdom.

There is also clear evidence that the EU habitats laws have had a beneficial effect; Kate Jennings of the Royal Society for the Protection of Birds (RSPB) notes that protected sites in the UK were being lost at a rate of 15% a year before the adoption of the EU habitats and birds directives but that this rate declined to just 1% a year following their implementation.<sup>12</sup> Natura 2000 and the habitats and birds directives consequently play a key role in maintaining natural spaces and biodiversity that are valued by UK citizens who wish to see them remain protected. It is important therefore that we work with our European partners, to protect this legislation at the European level, thereby protecting nature in the UK.

Ambitious European environmental policies also offer business opportunities to progressive UK firms as they can become leaders in developing new technologies. The UK has the potential to be at the forefront of investments into carbon, capture and storage and renewables in order to meet our obligations under EU law and there are clear market advantages in doing so as all industrialised nations are facing climate change and need to meet the challenges posed by the decarbonisation agenda. The Confederation of British Industry (CBI) suggested that green business accounted for 8% of GDP, a third of UK growth in 2011-2012 and could add a further £20 billion to the UK economy.<sup>13</sup> Indeed UK businesses played a key role in calling for ambitious domestic and European carbon targets in order to provide a more certain investment climate for industry. The UK's carbon budgets and climate change committee set an example that can inform other states within the EU

<sup>&</sup>lt;sup>7</sup> http://www.theguardian.com/uk/2011/nov/29/autumn-statement-george-osborne-green-policies

<sup>&</sup>lt;sup>8</sup> http://www.theguardian.com/environment/2012/mar/22/conservation-business-review

<sup>&</sup>lt;sup>9</sup> <u>http://www.theguardian.com/environment/2015/may/12/100-british-conservation-groups-oppose-review-of-eu-wildlife-laws</u>

<sup>&</sup>lt;sup>10</sup><u>http://webarchive.nationalarchives.gov.uk/20130123162956/http://www.defra.gov.uk/statistics/files/Statistical-Release-13-April-2011-biodiversity1.pdf</u>

<sup>&</sup>lt;sup>11</sup> <u>http://ec.europa.eu/public\_opinion/flash/fl\_290\_en.pdf</u>

<sup>&</sup>lt;sup>12</sup> http://www.theguardian.com/environment/2015/may/12/100-british-conservation-groups-oppose-reviewof-eu-wildlife-laws

<sup>&</sup>lt;sup>13</sup><u>http://www.cbi.org.uk/media/1552876/energy\_climatechangerpt\_web.pdf;</u>

and via the EU on a global level. The EU is also our largest trading partner, thus EU membership offers us access to a larger marketplace and the opportunity to trade with our neighbours under favourable terms and conditions, which no doubt explains why 71% of UK businesses surveyed by the Confederation for British Industry (CBI) believed that the EU has been positive for UK companies.<sup>14</sup>

Thus, the UK's most important environmental policies that keep popular tourist destinations clean and attractive, maintain our air and water quality standards and provide business opportunities for UK industries, come from Brussels. The government's balance of competence review which explored whether there was a need or scope for a renationalisation of environmental policy found that a 'large number of organisations representing all sectors considered that it is in the UK's national interest for the EU to have a degree of competence in the broad areas of environment and climate change because of the advantages that this brings for the Single Market and environmental protection.<sup>15</sup> Perhaps most importantly, given the transboundary nature of environmental problems, in this more than any other policy area, it makes sense to partake in European regional policy-making. Only through cooperation with our European neighbours can we address forthcoming environmental challenges, such as climate change, which have wide-ranging economic and social implications. Unilateral action by one state cannot address the wide-ranging transboundary challenges that environmental policy raises. Only through participation in the EU do we as a nation stand a chance of shaping the position adopted by other key players on the environment such as China and the US.

# What would Brexit mean for UK environmental policy?

The question addressed to the British public 'Do you wish to remain a member of the EU?' masks the complexity of the choice that the British public are being asked to make. Whilst it is of course possible to ask the public if they want to leave the EU they should also be consulted on their preferences in the event that they vote 'yes' to an EU exit. One option is to pursue membership of the European Economic Area (EEA).

# Joining the EEA?

The examples of Iceland, Norway, Switzerland and Liechtenstein have been held up as showing the future prospects for a UK outside the EU. These states (with the exception of Switzerland<sup>16</sup>) are members of the EEA and as such enjoy preferential access to the Single European Market. However, whilst EEA members do not participate in Justice and Home Affairs, Common Foreign and Security Policy, the Common Agricultural Policy, and the Common Fisheries Policy, in order to gain preferential access to the EU market they do have to abide by the *acquis communautaire* – the rules and regulations governing the operation of the single market, including many environmental rules - but with some notable and important exceptions.<sup>17</sup> If therefore a Brexit is followed by the UK becoming a member of the EEA

<sup>&</sup>lt;sup>14</sup> http://www.cbi.org.uk/media-centre/press-releases/2013/09/8-out-of-10-firms-say-uk-must-stay-in-eu-cbiyougov-survey/

<sup>&</sup>lt;sup>15</sup> <u>https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/284500/environment-climate-change-documents-final-report.pdf</u>, p.6.

<sup>&</sup>lt;sup>16</sup> Switzerland is a member of the European Free Trade Area and negotiates access to the Single Market on a case-by-case basis.

<sup>&</sup>lt;sup>17</sup> <u>http://www.efta.int/~/media/Documents/legal-texts/eea/the-eea-</u>

agreement/Main%20Text%20of%20the%20Agreement/EEAagreement.pdf.

instead, then the implications are likely to be worse from an environmental perspective given the current government's antipathy to environmental protection. Whilst the UK will still have to abide by many of the same EU environmental regulations that exist today some of the most environmentally significant policies are currently excluded from the EEA environmental policies,<sup>18</sup> specifically the directives on:

- bathing water,
- birds,
- habitats,
- And aspects of the water framework directive.

Consequently, membership of the EEA will mean that the UK government will no longer be bound by EU laws in these areas. Currently, under the terms of EU membership EU law takes supremacy over national law requiring member states to implement EU law or face legal action. If the UK leaves the EU then the government will be free to amend or repeal the acts adopted to give effect to the EU laws that are not included in the European Economic Area Agreement. It is consequently possible that the standards of environmental protection afforded by EU membership will be weakened depending upon the preferences of the UK government and parliament. Certainly the current government's negativity with regard to habitats and birds protection suggests that we would see this policy sector subject to deregulation and weaker protection.

On fisheries, it is perhaps possible to make a case that leaving the common fisheries policy (CFP) will be positive from an environmental perspective, given the unsustainable fishing practices that have historically characterised the CFP. However, it is unclear that a Brexit will have a major impact for a number of reasons. First, the CFP was reformed in 2013, crucially the practice of discards (throwing away fish that would take a boat over its guota or which were not covered by the quota) was replaced with a landing obligation<sup>19</sup>, so in principle the policy is no longer as unsustainable as it was historically, although it remains to be seen how effective the new policy will be in practice. Second, whilst as an EEA member the UK would take back control of fish within its exclusive economic zone (a 200 mile zone off the coast). that zone would be limited where it overlaps with other states' (and indeed the EU's) territorial waters. Moreover, as many fish species are migratory there is no guarantee that the UK will be able to secure the fish travelling through its territorial waters for itself, and the UK will remain subject to range of international agreements designed to manage migratory fish stocks. Indeed, the government's balance of competence review noted that the majority of respondents suggested that given the migratory nature of fish this area is one that benefits from supranational governance arrangements. Furthermore, UK fisheries will remain subject to scientific advice from the International Council for the Exploration of the Seas (ICES). Given these conditions it seems unlikely that the UK's quotas would change a great deal.

Third, the UK would have to negotiate a range of new bilateral and multi-lateral fisheries agreements with the EU and other major fishing states such as Norway and Iceland. The

<sup>&</sup>lt;sup>18</sup> http://www.efta.int/~/media/Documents/legal-texts/eea/the-eea-

agreement/Main%20Text%20of%20the%20Agreement/EEAagreement.pdf, annex XX.

<sup>&</sup>lt;sup>19</sup> <u>http://ec.europa.eu/fisheries/reform/index\_en.htm</u>.

Institute for European Environmental Policy state in their evidence to the balance of competence report on fisheries that:

It is clear that the UK would not benefit from nationalising fisheries management completely due to the shared nature of the resource and the problems this would present (namely the incentives against long-term decision making, and the added burden of negotiating fisheries agreements with all countries with whom the UK shares stocks).<sup>20</sup>

Similarly if we turn to the CAP we are likely to see the UK remaining subject to many of the same rules as it is currently, on competition grounds. Where the UK can nationalise agricultural policy there may be scope for the development of more sustainable farming practices but it will very much depend upon the preferences of the government of the day. If we look at the historical and indeed more recent approach of the UK we can see that our national government's environmental record on agriculture has been poor. The BSE crisis was a UK grown tragedy prompted by failure to pursue precautionary policy in the face of scientific evidence. The UK government has sought proactively to facilitate the release of genetically modified organisms in the EU, it has also tried to prevent the adoption of stronger pesticide regulations and, as noted above more recently has called for weaker habitats protection.

Another key policy of concern from an environmental perspective is the Transatlantic Trade Partnership (TTIP), which has been criticised for potentially weakening environmental standards and consumer protection in the EU. For many TTIP represents much that is negative about the EU – it exemplifies a neo-liberal approach to trade, and has been negotiated by Commission officials largely behind closed doors, although it is at least subject to democratic oversight in the European Parliament. However, if the UK leaves the EU but joins the EEA it will still be covered by all elements of TTIP that shape the single market rules, but with little say in their implementation. If the UK leaves the EU entirely then it is likely that the UK would seek to join TTIP as a matter of priority.

Overall, then from a political perspective preferring EEA membership to EU membership seems rather odd as the UK would remain subject to many of the same regulations as it is now (plus any future rules developed) but with much less influence over their content. EEA members are consulted on the content of EU laws but it is the member states of the EU that have most influence. Indeed the vast majority of EU environmental legislation is adopted by the ordinary legislative (or codecision) procedure under which legislation is increasingly negotiated informally amongst small groups of actors, EEA members are consequently unlikely to see their positions well–represented. Those advocating EEA membership therefore seem to be asking the British public to trade their current influence in Europe for less influence whilst having to implement many of the same rules, which seems like a poor choice. Another option would be to leave the European Union entirely without joining any of the European free trade bodies.

<sup>&</sup>lt;sup>20</sup> <u>https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/335271/fisheries-evidence-all.pdf</u>, p.73.

# Leaving the European Union entirely?

If the UK public vote to leave the leave EU and we do not join the EEA then from business and global standing perspectives the UK will without question be worse off economically. Global businesses currently located within the UK that benefit from access to the European market are likely to move their operations elsewhere in the Union if we as a state opt to leave. As noted by President of the CBI, Roger Carr, in 2013:

UK membership (of the EU) provides unfettered access to a single market of 500 million people, which today is our largest export customer. Departure would necessitate multiple bilateral agreements, frustrate free trade and damage our export performance in the medium term. Growth in new markets, however rapid, could not compensate for the inevitable decline in European activity.<sup>21</sup>

From an environmental perspective it seems inevitable that leaving the EU will see a watering down of environment policy given the current government. Whilst the Conservative manifesto did not explicitly identify environmental policy as part of its negotiation platform the spectre of red tape is invoked as a key area for renegotiation with our European partners. Moreover, with the notable exception of climate change legislation, in recent times the UK has failed to play a leadership role in the environmental policy field. The UK government has sought to block strict rules limiting imports of tar sands at the European level.<sup>22</sup>tried to water down the EU energy efficiency directive,<sup>23</sup> successfully blocked the adoption on binding national renewables targets for 2030,<sup>24</sup> threatened to block an EU pesticide ban protecting bees.<sup>25</sup> and has pushed for a weakening of habitats laws at the European level.<sup>26</sup> Rhetoric from key players in the Tory party and the UK Independence Party suggests that they would like to see the clock turned back on progressive environmental policies, condemning UK citizens to poor water and air quality, and negatively affecting business throughout the UK that benefit from tourism and wider ecosystem services, and raising the prospect of an increasingly built-up countryside with fewer green spaces. Such a perspective is peculiarly short-sighted and narrow, failing to take into account both the wider economic benefits that environmental policies deliver and their popularity with the public.

These negative impacts would be tempered by the likelihood that we will have to maintain some of the same EU rules in order to sell products within the EU. In other words, even with total withdrawal businesses will continue to be subject to many EU product standards.

# Conclusion

To conclude the Cameron referendum gambit is a poorly-thought through policy designed to see off his political opponents from the right with too little consideration given to the consequences of a UK exit for our environment, economy and international standing. No state has ever left the EU before so there are many unanswered questions about exactly

<sup>&</sup>lt;sup>21</sup> http://www.cbi.org.uk/media-centre/news-articles/2013/01/leaving-the-european-union-would-be-bad-forbritain-writes-sir-roger-carr/ <sup>22</sup> http://www.guardian.co.uk/environment/2011/oct/27/uk-eu-tar-sands-regulation?INTCMP=SRCH

<sup>&</sup>lt;sup>23</sup> http://www.guardian.co.uk/environment/2012/jun/14/uk-government-eu-energy-efficiency?INTCMP=SRCH

<sup>&</sup>lt;sup>24</sup> http://www.euractiv.com/sections/eu-priorities-2020/eu-leaders-adopt-flexible-energy-and-climate-targets-2030-309462

<sup>&</sup>lt;sup>25</sup> http://www.guardian.co.uk/environment/2013/mar/13/owen-paterson-ban-pesticides-bees

<sup>&</sup>lt;sup>26</sup> http://www.theguardian.com/environment/2015/may/12/100-british-conservation-groups-oppose-review-ofeu-wildlife-laws

what consequences will follow if we do so. Will we go into the EEA? Or will we go it alone? Will current EU law remain in place until repealed or amended? The phrasing of a referendum question is inadequate for capturing the complexity of the choice the British public are being asked to make. The options available in the event of an exit and the implications arising from each of those options need to be explained so that the British public can make an informed choice, not least because in the vent of a no vote it looks as if Westminster politicians will decide on the next steps for the UK without further consulting the public.

From an environmental perspective, whilst it is not written in stone that an EU exit will lead to a weakening of UK environmental legislation, the frequent attempts by Conservative UK ministers to weaken progressive environmental policy at the European level suggests the weakening of environmental policy is inevitable. By being part of a group of nations where some at least are more environmentally progressive than the UK we can hope to mitigate some of the domestic deregulatory zeal that the current government is pursuing. Even if we become members of the EEA several crucial areas of policy are excluded from the agreement, which raises for example, the unpalatable prospect that rather than seeing a continuous improvement in bathing water quality and the provision of useful up to date information as the latest directive is implemented we could see a return to poor water quality with little to no information provided to UK citizens. Whilst many would like to see a repatriation of agricultural and fisheries policies, there is little suggestion that these areas would become more sustainable if decided in a domestic context.

Therefore for the sake of the health of UK citizens, the natural environment and progressive UK British business interests, European Union membership remains Britain's best option. This is not to claim that EU membership is a perfect option. Currently the EU's poor democracy, prioritisation of economic growth above other interests, and the pursuit of the TTIP threaten current environmental safeguards and make achieving new standards more difficult but not impossible. But the counter-factual of leaving the EU is a UK where nature laws, bathing water standards and other environmental safeguards are likely to be jettisoned and under the current UK government scope for environmental gain appears to be close to zero.

# Dr Charlotte Burns, July 2015

# References

Barton, J. and Pretty, J. (2010) 'What is the Best Dose of Nature and Green Exercise for Improving Mental Health? A Multi-Study Analysis', *Environment, Science and Technology*, 44(10):3947-55. Jordan, A. (2002) *The Europeanization of British Environmental Policy*, Basingstoke: Palgrave Macmillan.

Lawton, J.H., Brotherton, P.N.M., Brown, V.K., Elphick, C., Fitter, A.H., Forshaw, J., Haddow, R.W., Hilborne, S., Leafe, R.N., Mace, G.M., Southgate, M.P., Sutherland, W.J., Tew, T.E., Varley, J., & Wynne, G.R. (2010) *Making Space for Nature: a Review of England's Wildlife Sites and Ecological Network*. Report to DEFRA.

Lowe, P. and Carter, N. (1994) 'Environmental Politics and Administrative Reform', *The Political Quarterly*, 65(3):263-274.

McKenna, J. Williams, A.T. and Cooper, A.G. (2011) 'Blue Flag or Red Herring: Do Beach Awards Encourage People to Visit Beaches?' *Tourism Management*, 32:576-588.

Morgan, R. (1999) 'Preferences and Priorities of Recreation Beach Users in Wales, UK', *Journal of Coastal Research*, 15(3): 653-667.

Patterson, A. and Gray, T. (2012) 'Unprincipled? The British Government's Pragmatic Approach to the Precautionary Principle', *Environmental Politics*, 21(3): 432-450.

Rose, C. (1990) *The Dirty Man of Europe: Great British Pollution Scandal*, London: Simon and Schuster Ltd.

World Health Organization (2013) Review of Evidence on Health Aspects of Air Pollution – REVIHAAP(interim report), URL: <u>http://www.euro.who.int/en/health-topics/environment-and-health/air-guality/publications/2013/review-of-evidence-on-health-aspects-of-air-pollution-revihaapinterim-report</u>. Wurzel, R. (2005) *Environmental Policy-Making in Britain, Germany and the European Union,* Manchester: Manchester University Press.