

Bogs¹ – when they're gone, they're gone

Frank J Convery, chair,publicpolicy.ie²

Since we first colonized this island about 10,000 years ago, we have engaged in two huge clearances of nature. The first was the elimination of the native woodlands; we cleared our natural endowment to such an extent that only a few solitary and meager residues remain. This loss only becomes apparent when one visits countries like the US and parts of Europe, where, by a combination of wisdom, courage and good fortune, they have conserved for their posterity great swathes of what nature created for them in their National Parks and Wilderness areas.

The second Irish clearance is now almost complete – the harvest of the great wilderness we inherited from nature after the ice age – the raised bogs of the Midlands. The major industrial use has been peat for fuel, with peat moss for garden use a subsidiary product. Extraction at scale to feed power stations has been the work of Bord na Móna (Turf Development Board) a state company, established in 1934, which focused on developing the large raised bogs. Its turf extraction will wind down over the next two decades, leaving about 100,000 hectares where the peat has been cut away. The other developers are land owners, mostly farmers, many of whom have the right to extract peat from bogs. I spent many happy hours as a child on the Holly Hill moss near Gulladuff, County Derry, where my father's family had turbary rights. The turf was harvested by hand, and neighbours worked together saving the turf, in an atmosphere that combined hard work with great humour and sociability. And of course, in my memory, the sun always shone. Many have these sepia-tinted memories, which go some distance to explain why turf cutting and turf cutters continue to command affection.

But there is a compelling case in the public interest to conserve the last remaining 1 per cent of so of raised bog that has not been significantly developed. Reasons include:³

- Learning from those who did not conserve any of their endowment and have regretted it; the Dutch are spending millions of Euros trying to recreate a plausible facsimile of what they have lost. A visit to the Netherlands sponsored by the Dutch Foundation for the Protection of Irish Bogs involved going to a tiny patch of 'new' embryonic bog costing huge amounts of money; one of the Irish party went under the rope to examine it more closely, and was almost arrested for despoiling such a precious and scarce asset – 'like scratching the Mona Lisa to assess its qualities', a Dutch observer opined.

¹ 'Bog' is derived from the Irish word for 'soft' – 'bogach', soft ground. The fuel which comes from a bog is called 'peat' in England, and 'turf' in Ireland.

² Declaration of interest. The author was a trustee of the Irish Peatland Conservation Council, director of the UCD Environmental Institute which published *The Bogs of Ireland*, a contributor to *Bogland*, and a friend of retired high court judge John Quirke.

³ The science underlying these points is available in: *Bogland; Protocol for sustainable peatland management in Ireland*, funded by EPA, and available at: <http://www.ucd.ie/bogland/FinalReports.html>

- Pride, the ability to show our children this is what our earliest ancestors confronted, and lived and worked with. The ‘Green Schools’ programme is creating a rising generation that will not understand how their forebears could have been so feckless as to destroy the last remaining evidences of their inheritance.
- Presenting unique combinations of plants and animal life. In their definitive book on Irish Bogs⁴, John Feehan and Grace O’Donovan devote detailed chapters to plant life, trees, mosses and fungi, animal and insect life on the bog. When most of us look at an undeveloped bog, we see a brown desert. But to the trained eye, there is incredible richness, which they capture, and which is almost infinitely expandable as our ability to see what is worth seeing improves.
- Protecting the quality of water, and (in some cases) mitigating flooding
- Storing carbon and reducing greenhouse gas emissions. The global stock of carbon in peatlands is estimated to be twice that which is held in forests. Emissions occur when the land is drained, and the carbon oxidizes. Managing the global stock of carbon to ensure that releases are at a sustainable level is a huge challenge, especially because oxidation is likely to accelerate as global temperatures rises. But emissions from peatlands are not yet measured under international and European rules, which is just as well; our emissions from bogs exceed the total emissions from residential, commercial and industry.

Table 1. Area of Peatland and Stock of Carbon (expressed in terms of CO₂), by Country

| Country | Area (km ²) | Stock (billion tonnes of CO ₂) | Ranking in terms of stock | Emissions Million tonnes of CO ₂ per an |
|-----------|-------------------------|--|---------------------------|--|
| Russia | 1,390,000 | 417 | 2 | 100 |
| Canada | 1,136,000 | 569 | 1 | na |
| US | 1,127,000 | 239 | 3 | 70 |
| Indonesia | 270,000 | 202 | 4 | >500 |
| Finland | 85,000 | 5.3 | 8 | na |
| Sweden | 66,680 | 18.3 | 9 | na |
| UK | 17,100 | 6.6 | 13 | na |
| Ireland | 11,500 | 4.2 | 17 | 22 |
| Total | 4,155,459 | 2018 | | |

Note 1: Health warning – data for peatland – especially stocks and emissions, are indicative only, being less well measured than are the equivalent for forestry.

Note 2: tonnes of C are from the source below; they are converted to tonnes of CO₂ by multiplying by 3.67.

Source: Kaat, Alex, and Joosteen, Hans, 2008. ‘Factbook for UNFCCC Policies on peat carbon emissions’, Wetlands International and University of Greifswald, available at:

⁴ Feehan, John and Grace O’Donovan, 1996. *The Bogs of Ireland* – an introduction to the natural, cultural and industrial heritage of Irish peatlands, Environmental Institute, University College, Dublin, pp. 518

<http://www.wetlands.org/LinkClick.aspx?fileticket=Dg7X8aI83q4%3d&tabid=56>

If the public interest in conservation is so clear, why have we such difficulty in protecting what remains? A very interesting window on the causes can be discerned from the Quirke Report on the Peatlands Forum 2012, which met 28th February – 2nd March 2012.⁵ This was convened to bring landowners – about 240 contributed - whose bogs are to be conserved, which will involve prohibition of turf cutting, to a public forum where officials could respond to their points and complaints. This was animated by the need to comply with the requirements of the EU's Habitat Directive⁶, which requires that habitats of uniqueness and scarcity which are of European importance be protected. It is a source of embarrassment that we have to be corralled by the EU into doing what is so manifestly in our own national interest. Owners have been offered compensation, but the general feedback from those present at the meetings was very negative - concerns included uncertainty about property rights, turbarry rights, access to alternative fuel and its quality (10 tonnes of cut turf to be given to each family), lack of consultation on designation, flooding, fear of not getting paid, risk of fire, not enough compensation, breakdown in trust with the Parks and Wildlife Service. And there was emotional language 'Don't want to betray our memories for 36 pieces of silver' and a generalized preference for 'de-designation' that would allow them to continue to cut turf.

The fundamental problem is that the public good benefits – carbon sequestration, water quality enhancement and storage, conservation of plant and animal life and associated landscape quality etc. - cannot be 'captured' by the land owner. And there is so little left, that we have no choice as to what to conserve.

It is interesting to note what was missing from the discussions. There is no recognition that turf is a wasting asset and the ability to cut it will disappear some time in the future in any event. When it's gone, it's gone forever. Instead of sourcing turf outside the protected zones, why not have a dramatic upgrade in the energy efficiency of the home as an option? Comfort levels rise, and costs fall. Or replace turf with wood, which grows in hedgerows and can be burned in the latest stoves, which are very efficient? There is no pride or excitement evident at the prospect of conserving a unique world – the last Irish wilderness. And no public recognition for doing so. It is clear that some turf cutters have a detailed knowledge of their bog, and could play a valuable role in managing and interpreting it in its conserved state.

The logic of involving bog land owners is clear. It is not clear why those third parties doing contract cutting should be involved. The great redwood groves we enjoy today in John Muir wood in California would not exist today if we had asked the loggers of the 19th century to decide their future.

⁵ Chaired by retired High Court Justice John Quirke, available at:

<http://www.ahg.gov.ie/en/Publications/HeritagePublications/NatureConservationPublications/QUIRKE%20REPORT.pdf>

⁶ Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1992L0043:20070101:EN:PDF>

What to do?

1. Learn the lessons for future EU Directives. Signing up to a directive should by Irish law be accompanied by an implementation plan, where the key elements needed to deliver - the who, what, where, when and how - are addressed unambiguously. (Non) communication was a big weakness in the implementation of the Habitats Directive and we need to learn the lessons, which include the fact that the skill set needed to deliver a demanding outcome is likely to be much wider than that to be found in a single agency; in this case, talents in ecology, law, economics, alternative energy, agriculture were a minimum requirement. The pattern of drifting into non-compliance and legal proceedings at EU level undermines our standing in Europe and conveys an impression of amateurism, it imposes excessive costs and stresses and in the end creates disillusion by citizens with Europe which is entirely undeserved.

Responsibility for the lead in European Affairs is now with the Taoiseach's (Prime Minister) department. Ensuring that full professionalism is brought to bear in good time⁷ should be at the top of the priority list. Quirke's recommendation (number 10) that 'a national plan....should be prepared' captures an idea which should apply to the implementation of all future directives, and be imbedded in the Irish policy system.

2. Put a team together focused on getting property rights defined as accurately as possible. To the extent the confusion over property rights exists, a fundamental building block in implementing policy is lacking.

3. Appoint a mentor (one dedicated to each of the 33 or so bogs where contention is rife) to work with each landowner, whose job it is to help them take full advantage of the options they face (see below) and to recognize their contribution, including providing a customized information pack on their own property which documents its main features, ecological, cultural and historical, including the family history of the bog where cutters are interested in providing same. Where they are interested in playing a role as custodians and interpreters, this should be encouraged and facilitated. This will help repair the breakdown in communication.

4. Widen the choices available to include outright purchase, investment in energy efficiency and renewables, especially wood. Turf cutters with very low incomes should receive special attention and support.

5. The remuneration package should apply to all who conserve, but in particular to those who have acted responsibly and stopped cutting early on.

⁷ The Habitats Directive – available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1992:206:0007:0050:EN:PDF> was enacted into law in 1992. We are now 20 years into the implementation phase....

6. The carbon tax which applies to all other fuels should be extended to include solid fuels (coal and commercial peat). Not doing so reduces the revenue available to government to compensate turf cutters, and it also removes the price advantage that wood should have over peat and coal.⁸

7. Recognise the contribution made, and especially the values to the community.

Feehan and O'Donovan (p. 481) make the case: "The fact that many of those who are most ardently concerned about the conservation of bogs are 'outsiders' in some sense or other is exploited by some of those who stand to gain more from development: rekindling the suspicion, for so long prevalent in rural Ireland, that heritage is for those elite few who have nothing better to do than study flowers and old ruins, and is no concern of ours. It is a suspicion which seriously damages the growth of an awareness that the heritage of the bogs is the heritage of all: and indeed *primarily* the heritage of those who live and work among them."

⁸ There was a potential problem of coal with a higher sulphur content entering the Irish market, but this has been now been removed by the introduction of a new specification for the sulphur content of bituminous coal placed on the market for residential use in Ireland.