A distant landscape dimly seen: the bogs in 2050

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It is especially appropriate that this 13th International Peat Congress should be taking place here in the Midlands, because here we are in the very heart of the bogs and at the centre of the peat industry in Ireland – and it is probably the last time it would be so appropriate, because we have passed the point of 'Peak Peat'. Peat production will be declining rapidly from this time forward, and the great state organisation that is Bord na Móna can now count its remaining years of peat production on its fingers. I have had the privilege over the last few months in my capacity as one of the Scientific Chairpersons for the Congress of reviewing all the papers and posters presented, and this overview prompts a certain reflective perspective on the role of peatlands I would like to share with you: in my own case coloured by more personal considerations: because this is where I was born and grew up – indeed sharing the same birth year as Bord na Móna – and it is still my home, at least on the weekends when I can escape from Dublin.

Our shared birthday gives me a span of years sufficient to appreciate the scale of change in the peatland landscape since the birth of Bord na Móna. I can remember Clonoghill Bog outside Birr – the most recent Bord na Móna bog to come into production, and it will be one of the last – when it was undisturbed except for the annual harvest by hand along its edges. It still had a lake at its heart, with a fringing forest of royal ferns taller than our young heads, and patrolled by the first dragonflies to fire my young imagination. I treasure the memory of early summers spent cutting turf here. I can remember the last nightjars patrolling the heather and pines on the older turbary.

So much of the natural wonder of the bog was unseen, unheard by us then, preoccupied as we were with the exhausting exhilaration of harvesting the turf. It only began to come into focus on subsequent visits years later, when nobody cut turf by hand any more and the spread-ground had taken on the abandoned feel of a school playground during the summer holidays. I don't think we ever really imagined that not only would the nightjar disappear, but that the bog itself could be gone in our lifetime. We find it difficult for all sorts of reasons to see more than a few years into the future. Think back to the Ireland of the 1950s – could we ever have imagined what the world of 2008 would be like! Global warming and the biodiversity crisis did not exist for us in 1946, nor was there any awareness of the population explosion or the global water crisis and the challenge of feeding 10 billion in a water-challenged world. All of our attention was on the task of coaxing into flame the glowing embers of an economy that had very few natural resources at its disposal.

In 1945 Todd Andrews, Bord na Móna's first chairman, visited Turraun, the first bog to be brought into industrial production: and in his autobiography he left a vivid account of the poverty of this part of Ireland at that time, only 60 years ago. In the little village of Pollough whee the men who worked on Turraun bog lived, be found 'evident poverty and squalour on a scale much worse than I had ever seen, even in the Dublin slums of my youth. Pullough was so isolated as to be virtually an island isolated from the outside world' (Andrews, 1982). The great hope was that the large-scale industrial strip mining of the raised bogs, the one resource that we had an abundance of – an unlimited abundance as it must have seemed in the beginning – might be the beginning of a more prosperous age. And indeed it did transform life here in the Midlands by that significant increment through the late 40s and 50s: to the threshold of, and on into, the new era of EEC prosperity, when the material well-being we now enjoy was as yet no more than a gleam in the eye of the cub that would grow up to become the Celtic Tiger.

Back in 1950 we gave little thought to how the bogs might be in 50-60 years time – any more than we give much thought now to how they will be 50-60 years hence, or what contribution they might make to our economy. The thinking was that in due course, when the harvest of the bogs was exhausted, an area of good Irish land the size of a new county would be at our disposal for conversion to agricultural land and for afforestation, with an undrainable residue for recreational and amenity use. We now know this optimistic scenario to have been inadequately uninformed about the physical and chemical nature of cutaway bog, and about how *the way we value land* would itself change over time. We have lost interest in converting cutaway bog into grassland for economic reasons, and find the commercial afforestation of cutaway continues to be problematical. Although – true to their mission of making Bord na Móna a company that continues to be economically profitable – many within the Bord continue to seek alternatives that will turn a profit in the conventional sense, the most informed and grounded authorities both within and outside of Bord na Móna now accept that *the best we can do* with much of the cutaway is to allow and encourage the development of the mosaic of species-diverse ecosystems that will develop spontaneously.

But my point here is that this *is* the best thing we can do: not the second best, not the only thing we can do since other, more profitable options no longer appear viable. Sixty years ago we could not have foreseen that we would come to *value the other functions* of peatland in a way that might in certain circumstances outweigh what in conventional economics would be considered the more productive functions.

We understand and appreciate much better than we did 50 or 60 years ago the many *ecosystem functions* other than the productive function (in the narrow economic sense) that different dimensions and facets of natural ecosystems – including peatlands – perform in our lives. In the economy of the Midlands in the decades following the establishment of Bord na Móna the bogs were of greatest value to us as a source of the raw material from which we could make turf or briquettes, or burn to generate electricity. We had little time or leisure to consider the recreational, aesthetic, ecological, cultural or spiritual functions they served.

A few decades from now the great machines will fall silent, and take their place in the iron graveyards and museums where earlier models already rust. We will still be here then, when there is no more turf to burn. Our children will be here in 50 years, when oil will be too precious to burn. By that time there will be concern over the ecological change consequent on global warming in those bogs on which we have conferred a conservation status equivalent to 'hotspots.' The most recent analysis warns us of the possibility that unharvested peatlands may even be eliminated by climatic change predicted for the rest of this century (Jones *et al*., 2006).

And although we cannot *see* into the future, and our capacity to *imagine* what the future might be like is limited by the conditioning of our psychological heritage, we can discern the challenge that reaches back to us from that future half a century and further hence, when the inevitable trends we can read today in human population growth and world farming will have *compelled* us into a new self-sufficiency we might have adopted with less pain if we humans had greater capacity and determination to use our knowledge and insight to plan for a time fifty years down the line.

By this time land that we have taken out of production or allowed to decline in productive capacity will need to be reclaimed for a new kind of agriculture: in which new insights of ecology and genetics, and new technologies to facilitate sustainable land management, will be spliced with the techniques of maintaining inherent productivity learned during the several hundred years before they were consigned to a top shelf by the input-intensive model that has dominated the last short 50 years.

The long-term prospect for farming is intimately bound up with the long-term prospect for forestry and the bog in general. Fifty years hence we may have come to depend upon timber for household fuel from the woods now taking hold on much marginal farmland. I would expect that our forest management skills and the energy efficiency measures with which the new woodland resource is managed will have come of age in 50 years, and in parallel with those developments we will see a continuing shift in the balance of the values we set on bogland. There are moves afoot today to move the focus of conservation away from the 'hotspot' approach favoured in recent decades, in which most of our care and resources is targeted on a small number of areas selected on the basis of conservation parameters alone, and to broaden the focus to include all the ecosystem services biological diversity performs for our welfare and on the economic quantification of these services.

In the changed circumstances of 40 years time it might appear that the afforestation of substantial areas of cutaway would acquire a new urgency. But even if we assume that continued research can overcome the silvicultural challenges that have hitherto balked economic forestry on cutaway bog, what we also need to remember is that in the warmer world of 2050, with a world population somewhere around 10 billion, with biodiversity reduced and confined as never before at a time we will have come to appreciate as never before the full spectrum of functions it serves in human life, cutaway will have come to be treasured as the last place on our doorstep to which we can retreat from our frenetic world in order to experience contact with nature.

While we still await even a preliminary attempt at the economic quantification of ecosystem functions and services in relation to the cutaway of 2050, it is very clear from comparable studies that their total value to society, to the community, greatly outstrips the purely monetary return to be made by concentrating on any short-term profit (Constanza, ; Pretty,). It is short-sighted folly to be messing about experimenting with the planting of energy crops on the cutaway when there is so much marginal and neglected farmland. *There is greater value to society in the long term in facilitating its capacity to fulfill the other ecosystem functions it performs*, functions that productive land can less richly perform.

We need to concern ourselves *now* with this perspective if we are to ensure that we don't do something else on our watch that our grandchildren will have cause to blame us for. I referred earlier to the way history demonstrates our limited success in using our intelligence to foresee and shape our own future. When the great German philosopher Hegel cast his brilliant, encyclopedic mind over the course of human history in the early 19th century, one of the things that struck him above all was that (as he wrote in the introduction to his magisterial *Philosophy of History*) 'What experience and history teach is this – that people and government never have learned anything from history, or acted upon principles deduced from it.'

As we try to peer prophetically through the misty curtain of time that stretches in front of us as we try to see 50 years into the future, we need to remind ourselves how poorly we saw that far ahead – to the present time – 60 years ago. But at the same time our *capacity* to see ahead has never been greater, so we should be able to penetrate that temporal mist to some extent: as we need to do if we are to take the right actions now in order to ensure that we do not compromise the contribution of the bogs of the future to our grandchildren.

References

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