Human Exploitation of the Peak District Moors and Bogs – the challenges of a managed cultural landscape

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Preamble

In 1881, Edward Bradbury on an excursion to Errwood noted a gritstone cottage with a filmy peat smoke among the ragged pine trees. He goes on to describe peat burning in an old-fashioned fireplace with a three-legged iron pot, and a bottle of whisky on the table. He likened the scene of the Snake Inn to something akin to Sutherlandshire. He further stated that 2,000 acres of common land around Kinder had passed to private ownership, and that the poor of Hayfield had been robbed of their 40 acres of turbery at Poor Man’s Piece. This was near the end of common subsistence usage.

Summary

• Despite popular, public opinion, the Peak District is a cultural landscape not wilderness.

• Popular perceptions derive from the ‘romantic’ topographers and writers of the 1700 and 1800s, and then the recreational access campaigners of the 1800s and 1900s.

• Understanding of these landscapes has changed dramatically over the last 30 years with the work of Tallis, Anderson, Shimwell, Barnett, Bevan, Ardron, Gilbert and others.

• Moors and bogs were much more widespread and extensive in the past, but have been diminished and fragmented by agricultural ‘improvement’, marginal development, and the impacts of long-term human exploitation including drainage. In recent centuries,
air pollution has also taken its toll and burning, both deliberate and accidental have further affected the environment.

- A major driver of change has been fuel exploitation, both domestic and industrial, with more peat removal in medieval and early industrial times from the Dark Peak than the Norfolk Broads.

- Community peat cutting continues to the present day at just one location, The Graveship of Holme. Here according to Arthur Quarmby, the present Constable of the Graveship, domestic peat fuel has been cut since the time of Henry V (1400s). This is the living cultural history of the bogs.

- Peat removal by various agencies and for different reasons has impacted massively on landscape and the wider environment. It has changed wildlife, hydrology and human use and perception.

- The Peak District is not unique in this widespread but frequently over-looked driver of change in the UK uplands.

- Intensive management and manipulation of these cultural landscapes for game, particularly red grouse, complicate further our attempts to prioritise long-term conservation objectives.

**Introduction**

This paper complements that given to the Royal Geographical Society at Losehill Hall April 2005 on _The Peak District Bogs and Peatlands: Their cultural history and the implications for conservation._

Many visitors to the Peak District believe that they are seeing an area not only of natural beauty but also of wilderness. Conservationists too, are often driven by a vision of wild and natural areas. Some of these perceptions are consequences of long-held images and beliefs now deeply ingrained in our psyche. Upland areas generally, and the Peak District in particular have been viewed with fear and trepidation by visitors since at least the medieval period. Charles Cotton in 1681 in the _Warden of the Peak_: described it as 'Environ'd round with nature's shames and ills, Black heath, wild rock, bleak crags and naked hills.' This was at odds with the formal and with God's creation and was even linked to an abhorrence of the fall from grace of Mankind. He described the Peak District hills as ‘ignoble jet’, ‘impostumus boils’, and the ‘warts and pudenda of nature’.

Over the centuries images of heath and moor have been created by writers, artists, and nowadays photographers. Some are factual and others are romanticised. The observers and portrayers themselves fall into distinct groups in terms of their objectives, backgrounds, and target audiences. Many accounts are the itineraries and diaries of gentlemen (and gentlewomen) travel writers and topographers. These include the classic accounts of Daniel Defoe, Thomas Pennant, Samuel Johnson, and Dorothy Wordsworth etc. They observe and describe the landscapes through which they travel, the people they see, and those with whom they share hospitality. Their reactions to experiences and to environments helped forge the images and perceptions of their contemporaries, and still affect us today.

Defoe's description of the Peak District moors in 1724 (though often misquoted) influences reactions and expectation to this day. _'This, perhaps, is the most desolate, wild, and abandoned country in all England.'_ These feelings applied to many upland areas and around Lancaster the hills were '... high and formidable only, but they had a kind of inhospitable terror in them ............... all barren and wild, of no use or advantage to man or beast!'
Westmoreland is described as a ‘… country eminent only for being the wildest, most barren and frightful of any ……’. In the south-west, Devon was ‘…at first sight, a wild, barren, poor country; …’.

Louis Jennings in the 1800s described the northern Peak as ‘very rarely traversed by human foot – a mass of stern and lonely hills, many of them with rounded tops, and beyond them again is a wild and trackless waste of moss and heath and bog, intersected by deep runnels of water, soft and spongy to the tread, and dotted over here and there with treacherous moss. So strange, so wild, so desolate a region it would be hard to find elsewhere in England ……’

Edward Browne in 1622 described the area as ‘……… this strange, mountainous, misty, Moorish, rocky wild country’.

These images affect our ideas of the area and hence our visions of a future landscape. All these are an intimate reflection of individual experiences and selective perceptions, of environmental and historical reality and imagination, and of personal taste.

**Human Impacts**

However, these are cultural landscapes and have been shaped by human use. This began with the massive erosion and acidification of soil that followed progressive clearance of upland forest, burning, and some cultivation of lower areas, from Bronze Age to Iron Age. Some of this was from permanent settlements other impacts were from transhumance use. Evidence is found not only in the upland zone, but also in the extensive deposits of materials washed down into the alluvial river valleys of the Trent and the Humber.

Later settlers would have exploited the resultant landscapes in a variety of ways to meet their subsistence requirements. Plants would be gathered, wild animals hunted, and domestic stock grazed. The landscape would provide material for building and for fuel. The impact of upland fuel economy, with the cutting of peat and turf, of rush and bracken, and associated drainage of vast areas of hillside, hilltop, and valley-bottom mires, has helped shape the landscape (Rotherham, 1998). There was also widespread cutting of ling and gorse, and gathering kindling and other materials, for fuel, bedding, and fodder. Birch, holly, and bracken were each harvested for a diversity of uses, including fuel and building materials. Both turf and ling were widely used as cheap materials for the construction of buildings for people and stock.

**Grazing and Livestock**

The extent of grazing by wild animals in the upland zone has not been fully assessed or calculated (Vera, Yalden, Buckland, pers. comm.). However, it is clear that over a period of maybe 2,000 years or more, there was a shift from wild animals to domesticated stock. Until post-Domesday most grazing would be small-scale use with mixed cattle, sheep, and perhaps goats, and oxen or horses for power. With the advent of monastic granges for large-scale wool production, the sheep numbers increased, and this trend continued with the large, private estates of the 1700 and 1800s. By the 1900s with agricultural subsidies and headage payments, and the easy availability of electricity and petrol power, the numbers of cattle, oxen and of horses declined steeply. The habitat matrix that they maintained also reduced; hay meadows, and oat fields were largely lost. Other features such as drove roads and packhorse routes were abandoned. Ancient pollards and holly hags were forgotten and lost.

The huge numbers of sheep were maintained by public subsidy, and intensive, rotational burning of heather moor. In order to facilitate this regime, extensive moorland gripping or draining was carried out on a huge scale. Invasive bracken spread, fewer people worked the uplands, and the habitat matrix was simplified.
Fuel and Subsistence

Burning of furze and peat was recorded at an early date by Fitzherbert of Norbury in *The Boke of Husbandire* (1523). Tom Tomlinson in the 1980’s, described the cutting and burning of peat by the community of Edale in the early to mid 1800s. However, apart from asides such as these, and the observations such as by Bradbury noted earlier, there is little written evidence of this important cultural use.

For many centuries the region would have held significant populations; both resident and in transit (such as drovers, jaggers, and herdsmen or shepherds on the summer pastures). They needed fuel and materials for subsistence. Occurring over many centuries, largely on a localised, domestic, but sometimes industrial scale, (Ardron *et al.*, 1995, 1996 and 1997), the effects of exploitation on vegetation, soil, and hydrology were massive, but are often overlooked. Furthermore, the subsistence utilisation extended down the hill into the valley, and beyond to the lowland plains. However, for most lowland areas, intensive land-use has obliterated almost all the evidence from the landscape. Progressive cessation of many of these land-use practices, during the twentieth century means that many workers are simply unaware that they may have occurred.

The boundaries of the high Peak District heather moors have fluctuated dramatically over the centuries. In the White Peak almost the entire cover of limestone heath was lost in the 1700s and 1800s. There has been little attention to the moors and peatlands around the periphery, and the extent of the former eastern outliers, and the massive contraction away from the eastern lowlands in recent centuries has been ignored. Periods of agricultural intensification were followed by abandonment and re-colonisation of moorland (Parry, 1977).

Evidence of major peat bogs and heaths extends many kilometres down towards the eastern lowlands with bogs and peat utilisation recorded from the western suburbs of Sheffield and Holmesfield for example, and then down to the valley mires and marshes of the Don and Rother Valleys. There was a well-known peat cut off Ringinglow Road close to Ringinglow Bog on the Sheffield fringe. Even urban areas that now seem unlikely had rights to cut turf for fuel. According to the *Ecclesall Enclosure Act* (1779) for land south-west of Sheffield:

‘-----there are within the Manor and Township of Ecclesall in the Parish of Sheffield several open commons, moors and waste grounds containing in the whole, 1000 acres or thereabouts.’

Carolus Paulus (1927) noted that from the books of the Vicar of Sheffield, Ecclesall in 1775 contained 1,128 families. The total population was about one and a half persons to the acre. The bulk of these people were described as cottagers, labourers, farm servants and squatters. The cottagers either owned or occupied cottages which by ancient custom had attached to them the rights of commonage on the wastes. These included the right to pasture one or more animals on the common, to cut turf and to extract fuel.

A peat bog serving local people existed until quite late above the Mayfield Valley, evidenced by road names such as Mospeate (or Mosspeat) Lane (now Slayleigh Lane), leading to Mospeate Field and its turbar, and place names such as Blackbrook, and Moss Pit Wood. Local people still extracted peat for fuel from their large gardens until the early 1900s. According to Muriel Hall (1974), much of this land had peat deposits and they were used for fuel.

There is evidence for the cultural landscape in many forms and from varied sources including archives. Maps produced from detailed archival research by Gordon Scurfield over a thirty-year period, present a unique insight into the former extent and connectivity of the resource. The overall impacts of the changes have included catastrophic losses on the biodiversity
resource generally. Heaths, moors, commons and bogs typically provide excellent habitat for a whole range of fauna and flora, and usually have feature such as ponds, pools, marshes, woods etc. intimately associated with them. The overall changes related to enclosure and cultural severance, were massive.

**Cultural Use**

Often described as ‘wastes’ and ‘commons’ by topographers and landowners, and relatively unproductive, they produced and provided sustainably over many centuries, fuel, food and building materials for local people, and grazing for domestic stock, across much of the countryside. Before enclosure and ‘improvement’, or abandonment, caused widespread and almost total destruction of commons, heaths, bogs and peripheral moorlands, most people relied on them for a diversity of products.

_A Landscape of Utilisation - Harvesting rushes in the Peak District_

Utilisation included peat cutting, ‘turf-getting’, ‘moss-gathering’, bracken and rush harvesting and other uses. The extent of well-defined peat cuttings around remaining areas of Peak District blanket mire, or around the North Yorkshire moors, is considerable. Along with this, thin peats and turf, on low-level moors were stripped away. In many areas there has been extensive ‘turf-cutting’ and ‘paring and burning’. In some cases this was associated with land improvement for agriculture, and the creation of in-bye land. Peat and turf cutting in upland Britain have greatly influenced the pattern and expansion of in-bye; which in turn has had a major bearing on the appearance of the landscape and distribution of human settlement, particularly around the moorland fringe.
The relative proportions of in-byre resulting from the removal of turf, thin peat, deep blanket mire, or ‘paring and burning’ are unknown, but the collective extent is considerable. This impact extended down the hills into the extensive lowlands, but in most areas the evidence has been swept away by the enclosures and subsequent agricultural intensification. Cutting and burning of material may have been a precursor for agriculture and may even have facilitated or financed land improvement works.

Where suitable landscape remains intact, upland or lowland, the widespread occurrence of drainage features and other cutting infrastructure, indicate that few ‘peatlands’ were unaffected. Impacts vary from enhanced biodiversity through small-scale pits and pools for example, to complete loss of species through gross removal of peat and drainage of the landscape. These impacts are described and discussed elsewhere.

Exploitation of landscape resources for fuel over many centuries brings about dramatic changes. Upland landscapes across Britain have been shaped and manipulated by fuel-associated management. Drainage and the removal of metres of organic material changed water holding capacity and hydrological behaviour.
Sport and Recreation

The earliest known sporting use of the region was as hunting grounds for the crown and for the local landowners. This was mostly for red deer, but presumably roe deer and wild boar would also have been pursued. This was in the Peak Forest, and then in the various deer parks and chases around the region; such as Rivelin and Wharncliffe. Impacts would have included the deliberate maintenance of holly hags for feeding deer in winter, and of lawns or launds such as in Rivelin for grazing and for gathering the deer together. By the 1700s the fashion for the deer chase had declined, in part due to changing agricultural landscapes in the lowlands, and in particular the enclosures. Lowland hunting moved towards pursuit of the fox, and with the advent of suitable firearms, the partridge. In the uplands, the red grouse was to become the main object of the sporting interests.

The impact on upland landscapes was immense, and continues to this day. Grouse shooting probably began on a small scale with hunters with guns and dogs. The extensive employment of gamekeepers was in place by the 1700s, and beating grouse to butts certainly occurred by the early 1800s. Mixed with sheep farming and forestry too, this brought a new level of sophistication and intensive land management to the area. The results were outstanding and
inspection of some local examples illustrates this. On the Duke of Rutland’s 11,533 acre Longshaw estate, 3,633 brace of grouse were shot in 1893. Having constructed a major shooting lodge at Longshaw itself in the early 1800s, there were then smaller lodges (White Edge Lodge, Warren Lodge at Curbar, and at Owler Bar). To facilitate easy access the Duke built the Calver road in 1840, skirting the moors to avoid any adverse impact on the shoot. To produce the scale of return in terms of reliable bags of grouse required many keepers and ruthless persecution of predators and trespassers. Again, alongside management for sheep, the grouse moor was burnt on a regular, rotational basis to favour heather, the key plant for intensive grouse farming. The ecological and landscape impacts of this management were immense.

Grouse bag

The Longshaw estate was sold in 1927, with some going to the fledgling National Trust and some to the Graves Trust in Sheffield. The era of public access and recreation was beginning. Momentum had been building throughout the 1800s with growing populations living in dire conditions in the cities such as Sheffield and Manchester. The demand for free recreational access, combined with the injustice of large tracts of former common land now private and keepered, meant this was a social and political pressure cooker. Over the next seventy years often bitter and sometimes violent disputes took place between some land owners and managers, ramblers and access campaigners, and increasingly and vociferous nature conservation lobby. The recent CRoW Act has addressed and attempted to resolve many of these issues. Today, sporting interests, forestry, farming, recreation, and conservation sit side-by-side in a still rather uneasy alliance.

Balancing the often-competitive demands of access, conservation, and commercial land management necessitates co-operation, compromise, and resources. These are not always sufficient, and the impacts and issues may at times raise uncomfortable truths to be addressed.

**Water Gathering Grounds**

Another aspect of upland zone management around the emerging urban centres was the increased need for water supply to both domestic and industrial users. This again necessitated
large areas of land to be set aside for the purpose and the exclusion of public access from many areas on the grounds of risks to health through water contamination. Combined with the pressures and conflicts described earlier, this generated a whole further set of issues such as conflicts over any access at all to the water’s edge or key areas of catchment, and between recreation and conservation. A further aspect of water management often over-looked, was the need for a ready supply of part-time labour in often remote areas. This was in part resolved by a network of small, tenanted farmsteads with a few fields and maybe a small area of moorland grazing. Such farm holdings often continued until the 1970s and 1980s and included small hay meadows and some arable, with often little agricultural improvement. These pockets of diversity would have been hugely important to upland birds such as twite and reed bunting, and the communities involved would no doubt have been involved in other activities such as moorland burns.

The presence of the reservoirs in today’s landscape adds to their wildlife interest and for many to their desirability as recreational landscapes. There are ongoing issues of conflicting recreational, sporting, and conservation interests.

Conclusions

There are many issues for contemporary managers that derive from this cultural history described very briefly above. These become more important when the depths of their ecological impacts are appreciated more fully. Furthermore, most of the issues and impacts are themselves closely intertwined. Teasing them apart for today’s management objectives is not easy.

It is important to understand some key issues and impacts:

- Massive change in landscape, soil, vegetation, and hydrology across the entire upland zone;
- Long-term changes due to cultural use and now due to the cessation of traditional practices;
- Catastrophic habitat loss and fragmentation around the periphery and in particular areas such as the White Peak Heathlands;
- Gross simplification of the habitat mosaic across most of the remaining areas;
- Beneficial impacts of small-scale cultural use and disturbance on many species, such as peat pits as habitat for upland Odonata and rare plants such as sundews;
- Impacts of intensive game management throughout much of the last 200 years maintained artificially high numbers of grouse, but suppressed or eliminated most predators;
- This intensive predator control may have also benefited many other species such as ground nesting birds – such as golden plover, lapwing, and curlew;
- Increased recreational use of the area clearly has major impacts as demonstrated during moorland closure for Foot-and Mouth Disease;
- Increasingly for the foreseeable future, recreational access, sport and tourism will be key drivers in the regional economy and disturbance is likely to increase rather than decrease;
- Tourism revenues are potentially fickle, seasonal and often not directly related to the management of the landscape resource on which they ultimately depend;
- Farming and game management may well continue to struggle;
- Traditional skills and knowledge of land management will continue to decline.

These upland peat landscapes continue to change, but no longer dominated by active utilisation such as subsistence grazing, cutting of peat or turf, and other cultural exploitation.
Contemporary moorland and heathland land-uses, such as sheep grazing, grouse shooting, and recreation, now contribute to the processes, but the balance is in flux. The vegetation of remaining blanket mires and wet moorlands continues to change associated with the drains and linear cuttings which still affect the hydrology. Fuel exploitation from former times is still influential through relict features such as peat pits, linear cuttings, and over-cut areas. Here as cutting has mostly ceased, secondary, ecological successions proceed, influencing associated fauna. Through the dominant vegetation, it also determines the appearance of today’s contemporary landscape.

**Fundamental Change in Cultural Landscapes**

This work identifies fundamental change in the landscape related to the long-term use of these areas for subsistence farming over many centuries. The scale of this and its impact have been grossly under-estimated. Enclosure, cutting and drainage, and finally, often catastrophic agricultural intensification or creeping urbanisation have altered the lower zones. Where upland areas have escaped this fate, the impacts of drainage, of isolation, and of fragmentation, have taken their toll.

Just as Oliver Rackham highlighted the cultural and historical importance of ancient woods, so we can see history in the moors and peatlands with long-term human impacts fundamental to today’s landscape. Without understanding the impacts over thousands of years, it is hard to address fully the needs of contemporary management. Furthermore, the effective conservation of the evidence of this use, the archaeology, is of great importance and of huge interest. Along with the positive conservation of living heritage such as the Graveship of Holme, this approach presents serious challenges to traditional conservation. For some reason the Peak District has lacked a body of knowledge, a local cultural heritage museum, or even a champion for this interest in rural ethnology. Compared with other regions such as North Yorkshire, the Yorkshire Dales, Wales, or the Scottish Highlands for example we seem to have lagged behind.

**Conservation Management Issues**

Much contemporary management happens with only limited recognition of the historic context. Furthermore, in considering history and landscape evolution the modern manager has to make choices that are very much subjective rather than objective. There is also a serious question as to the long-term impacts of cultural exploitation and the extent to which this landscape can recover. Since peat-cutting landscapes in the uplands have remained largely unrecognised, they have received no specific protection. Their protection up to now has been incidental, and due largely to the fact that land improvement over the centuries has been generally ineffective. Land uses such as sheep grazing and grouse shooting have found favour with the owners, and have served to protect the resource to at least some degree. However, enhanced and continuing drainage have been and continue to be extremely damaging.

There is a degree of recovery is key groups such as *Sphagna*, and some lichens for example, as gross air pollution has ameliorated (Ardron and Rotherham, in prep). However, to what extent can the impacts of hydrological disruption and habitat fragmentation be reversed? For example, with extensive upland peat cutting largely unrecognised, its relevance has been overlooked and few attempts made to quantify or reverse its effects. Indeed is it desirable to reverse the trends or should be landscapes be viewed as archaeology and of value in their own right, as with a lowland coppice wood?

The former extent of peatland landscapes in the UK, and their cultural uses, have been dramatically under-appreciated. The hand-cut peatlands and other aspects of this cultural heritage are important, with a need for the conservation and protection of at least some examples as conservation landscapes. An appreciation of the scale of this cultural impact can help inform the long-term conservation of a unique heritage, and its ecology.
Eutrophication, Succession and Species Loss

There are serious and long-term implications of the cultural severance of these landscapes from their subsistence exploitation over innumerable centuries. Whilst some of these such as reinstatement of appropriate grazing are being addressed by site managers others are intractable. The long-term exploitation for fuel in particular, but combined with grazing and hay-cutting, were fundamental in maintaining low-nutrient status; essential for many of the specialist fauna and flora. Abandonment of use has allowed a gradual but perhaps irreversible eutrophication with profound long-term implications.

Furthermore, the long-term implications of contraction of area, of widespread drainage, of site fragmentation, and of peat removal, must be understood. This is especially so if future management is to be effectively directed, and successful in the achievement of its objectives. Indeed, the objectives set should be fully informed of the consequences of these findings. Massive removal of peat and turf has dramatically affected upland hydrology, and engineering hydrology approaches to bog drainage have overlooked significant landscape scale impacts. The overall effects are defining for many sites and areas within the former peatland zones.

Issues and Conflicts

The future of the UK uplands has been subject to serious problems and major debates. It seems that not all the issues are understood and not all the options or constraints have been considered. The cultural landscape is complex and the consequences of history, of the environment, and of our perceptions (or misconceptions) of it are intertwined. These emerging tourism playgrounds were created by accident and the drivers of economy, of ecology, and of fashion. How they develop in the future may not be so easily defined as we sometimes think.
Selected References


