

Chillingham Park and its Wild White Cattle

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Abstract

The Chillingham herd of white cattle is briefly described, and the recent endeavours by the owners, the Chillingham Wild Cattle Association, to secure its future are reviewed. With generous support from individual donors and from charitable trusts, biosecurity is being enhanced and access for members of the public improved. As a result, the Association is now concerned with much broader issues than those which have faced it in the past, and which mainly related to practical issues of husbandry and pasture management. As conservation measures are now being directed towards the cultural heritage and general faunal and floral biodiversity of Chillingham as well as towards the cattle themselves, the Chillingham experience may well provide a model for other conservation ventures relating to historic pastoral landscapes.

The Chillingham herd

The Chillingham white cattle have inhabited Chillingham Park, in north Northumberland, for several centuries. Their early history is not known and the first written record dates from 1645. It has been contended that the herd dates from when the park was first enclosed, which could have been in 1225, but evidence is lacking. However, their very distinctive character is clear – no other British livestock (apart from Soay sheep) escaped the attentions of the Improvers in the 18th and 19th centuries (Hall & Clutton-Brock, 1988) and, almost alone among the world's 1.2 billion cattle, they are not subject to culling or castration. Although they are confined to a 135 hectare park, their way of life is that of a wild population and they give a remarkable opportunity to study the biology of cattle free of human interference. A reserve herd is kept in northeast Scotland.

They breed true for colour (white body colour with red ears, and a variable degree of spotting on neck and shoulders). Bulls probably weigh 300 kg, cows 280 kg, and shoulder height is about 110 cm. Cows of most British hill breeds weigh 400 – 500 kg (Tolhurst & Oates, 2001).

Chillingham Park

Prior to 1711, when the estate terrier now in the possession of the Northumberland Record Office was prepared, details of Chillingham Park itself were not, apparently, recorded precisely, though a licence of enclosure exists, dated 1626. The history of the park, so far as it is known, has been summarized by Hall (1989a). Essentially, it is a late medieval deer park with a late 18th century designed landscape imposed upon it, and the boundaries of the area available to the wild cattle have changed considerably over the centuries.

Chillingham Wild Cattle Association

Until 1972 the cattle had been owned by the family of the Earls of Tankerville. In that year the 8th Earl died and the cattle were transferred to the Chillingham Wild Cattle Association (CWCA) which had been set up in 1939 and which was granted charitable status in 1963. Chillingham bulls were used in other herds of white parkland cattle, but no record exists of the herd ever having received any animals from any of these so the connection with today's White Park breed is tenuous.

In 1989 CWCA celebrated its 50th anniversary, and this was marked by an article in this Journal (Hall, 1989b). The Association has 433 members, approximately 19% of whom live in

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Northumberland, 72% in the rest of the UK and 9% overseas. Since 1989, the way of life of the cattle has remained essentially the same, but there have been major changes at Chillingham, largely as results of developing views on the roles of agriculture and land management in environmental conservation. In May 2006 the herd numbered 23 males and 27 females. The reserve herd in northeast Scotland numbers 17 animals, semen has been collected and an embryo recovery programme is under way (Hall et al., 2005).

The right to depasture sheep (up to 300 ewes, plus followers) within the Park is not owned by CWCA. This has clear implications for biosecurity and for the amount of grazing available to the herd.



Cows and bulls on grazing at the foot of Chillingham Park. The wood in the background was planted around 1808.

Changes since 1989

Marren (2006), celebrating seventeen years of the journal “British Wildlife”, speculates that history may view 1989 as “the moment when politicians started taking green issues seriously”. Certainly, in 1989 many significant events took place for environmental policy and practice in the UK. Set-aside was introduced, and the scene was being set for the MacSharry reforms of 1992 whereby environmental protection would be acknowledged as an objective of the Common Agricultural Policy for the first time (Brouwer & Lowe, 2000). The Countryside Premium Scheme, a pilot for Countryside Stewardship, was also introduced in 1989 while memberships of the Royal Society for the Protection of Birds and of the National Trust reached the 500,000 and 2 million marks respectively. It was also the Year of British Food and Farming, inspired by the Royal Agricultural Society of England and staged as a confident assertion of the place of agriculture in national life and heritage.

While the policy, practice and public appeal of UK countryside conservation was clearly changing in tangible ways, internationally preparations for the Convention on Biodiversity, to be held in Rio de Janeiro in 1992, were well under way, while the Food and Agricultural Organization of the United Nations and the European Association of Animal Production were developing accessible global data banks on livestock genetic resources (Hall, 2004, chapter 8).

The 1989 article about Chillingham made no reference to the policy environment, yet in 2006 the ways in which CWCA operates are heavily influenced by these factors. Principal policy changes have been in the following areas:

- The acceptance at EU and Defra levels that farmland in the broadest sense is vital for conservation of biodiversity, for which the UK has international commitments, and as a landscape resource for the public to visit and enjoy;
- The realization that biosecurity in relation to farm animal diseases is of considerable public interest and concern;
- The emerging appreciation, prompted by the Rio Convention, that governments have responsibilities for farm animal genetic resources;
- The development of concerns for animal welfare;
- The increasing sophistication of the governance requirements for charities such as CWCA, the requirement for accountability, and the developing preference for funding of projects with stated deliverables, rather than provision of core funding of running costs.

This article revisits Chillingham Park and reports on how this new policy environment presents new opportunities and challenges to those responsible for managing this highly significant element of our national heritage.



Cattle crossing the remains of a masonry bridge and conduit. Rehabilitation of such historic features is of high priority, as is protection of the ancient alders.

Background

In May 2005, Chillingham Park (135 ha) and the fenced woodlands around and within it (139 ha), with the Warden's Cottage and various wayleaves and easements were bought for £395,450 from College Valley Estates. CVE manages landholdings in Northumberland which have been purchased for the public good by and on behalf of the Sir James Knott Charitable Trust, of Newcastle. The Trust had purchased the Chillingham properties in 1980 from the estate of the late 9th Earl of Tankerville and following the foot and mouth outbreak of 2001, CVE recognized that the ownership of the cattle and of the Park should be reunited. Thus, the cattle and the Park are now reunited under the same ownership and management, which they had effectively ceased to be in 1939 when CWCA was established as a tenant of the Tankerville estate. The neighbouring properties are Chillingham Home Farm, the Amerside

forestry land to the north, Bewick Moor and the National Trust (the Ros Castle property) to the east, and the grounds of Chillingham Castle, which are all under distinct ownerships.

Funds for the purchase had been raised by a public appeal, which has now, in June 2006, moved into its second phase, whose main aims are infrastructural and access improvements, enhancement of biosecurity, and establishment of endowment funds.

Since the appeal was launched, Defra's Higher Level Stewardship scheme has come into effect and an application to join is currently under negotiation. This will reduce dependence on visitor income. Annual operating expenditure is approximately £37,000 and visitor income provides about 40% of this. In 2005 there were 4,164 visitors, which contrasts with the early 1970s when there were over 10,000 annually who provided about 70% of CWCA's income. Under the HLS, there will be permissive access to perimeter footpaths, with scheduled visits in the company of the Warden, into the Park itself, for those willing to pay a fee to see the cattle at closer quarters and to hear the Warden's account of their history and habits.

As a candidate for direct public funding, which it has eschewed in the past, CWCA must show how its aims are connected with policy frameworks, and a competitive element enters into the process.

Policy frameworks

Heritage and biodiversity designations

Along with the formal garden and landscaped pleasure grounds of Chillingham Castle, the Park is in English Heritage's Register of Parks and Gardens of Special Historic Interest (Reference GD2047, Grade II: Landscapes & Gardens, University of York, 2002). It is a Site of Nature Conservation Importance (Berwick-upon-Tweed Borough Council, 1999) and is in the Glendale Area of High Landscape Value. The Park and its environs exemplify the Northumberland Sandstone Hills (landscape characterization: Countryside Agency, 2005). The Park represents a sizeable tract of Lowland Wood-pasture and Parkland, habitat types which are seen as "outstanding at a European level" (Joint Nature Conservation Committee, 2004). The lead partner in the Habitat Action Plan is English Nature.

Local and regional planning

Chillingham is mentioned explicitly at several points within the Framework chapter of the Berwick-upon-Tweed Local Plan. In relation to local economic development it can be seen in visitor terms as a component of the River Tweed catchment, a 2,000 square mile tract of countryside inhabited by 140,000 people. It is thought that tourism in the Tweed catchment supports over 5,500 full-time equivalent jobs and contributes £120 million annually to the local economy.

Farm animal genetic resources

In parallel with this new set of perspectives from which the Park in its own right is viewed, there have been developments and refinements in the view taken by policy makers of the cattle themselves. Defra is currently developing a National Action Plan on the conservation of Farm Animal Genetic Resources. This will fulfil one of the Government's international obligations under the Convention on Biological Diversity in relation to conserving biological diversity in food and agriculture.

One of the stages in the development of this policy was the publication (Defra, 2002) of the UK's official contribution to the study, to be published by the Food and Agricultural Organization of the United Nations (FAO), on the State of the World's Animal Genetic Resources for Food and Agriculture. The Chillingham cattle feature in the Defra report, and are on the official list of British rare breeds, which is lodged in the House of Commons Library.

Animal health, biosecurity and welfare

In the past, proof of compliance with animal health regulations was not a major concern of CWCA; autopsies have been carried out frequently, and evidence of important cattle diseases was always absent. However, the foot and mouth outbreak of 2001 together with increasing

regulation of the food chain gave an incentive to demonstrate this compliance and the health status of the herd was fully reported recently (Hall et al., 2005).

One might have expected, since 1989, an increase of public interest in the welfare of the herd. In the Netherlands, “rewilding” or “dedomestication” of cattle in the interests of ecosystem conservation has been controversial (Aukes et al., 2002), yet welfare concerns have seldom if ever been voiced by the public about the Chillingham herd.

Comparative and competitive elements

In recent years, conservation has become more oriented towards specified, quantified targets. While the Chillingham cattle and their uninterrupted association with the Park are unique, the appeal of the latter to the HLS reposes largely on its representativeness as a habitat type that is rare and important. Thus the management of the Park will need to take more cognizance of its value as a habitat than has been the case previously. This will influence decisions on sward management.

Whitehead (1953, 1963) summarised the histories of the Chillingham and other park cattle herds, though his accounts were rather uncritical and much additional material has come to light since his work. Rackham (1986) and Yalden (1999) place the cattle in the context of current historical and zoological thought. The other herds which survived into recent times were those of Cadzow (Lanarkshire), Chartley (Staffordshire), Dynevor (Dynevwr; Carmarthenshire) and Glan Faenol (Vaynol; Carnarvonshire). These four herds were crossed either with each other or with other breeds; the continuity of occupancy was lost for Vaynol and Chartley; and for all a more intensive form of husbandry (planned matings, castration and culling) was practised.

A formal synoptic account of these parks does not exist though some comparisons are possible. Chillingham, at between 100 and 215 m above sea level is much more upland in character, Vaynol being located between the 0 and 150 ft (0 – 46 m) contours, Dynevor between 100 and 250 ft (30 – 76 m), and Cadzow approximately 150 – 350 ft (46 – 107 m) above sea level. The ancient oaks of Cadzow (Peterken, 1999; Quelch, no date) do not have counterparts in the other parks, and neither does the rich lichen flora of Dynevor (Alexander, 1995). The old deer park at Dynevor is regarded by Cox and Sanderson (2001) as “... remarkable in that it contains both parkland and grazed high forest wood pasture with hazel forming a significant component of the vegetation. This park ... may well exemplify the dynamic mix of habitats within the natural wildwood landscape”. It also has a noteworthy grassland flora.

Outlines of the histories of Dynevor and of Cadzow are given by Y Faenol Cyf (no date) and Gazetteer for Scotland (2006a, b) respectively.

The National Trust owns some 150 parks. Cox and Sanderson (2001) surveyed 26 of these and found that only five could be said to be in ecologically good condition. Fertilizer has been widely used, and as a result “grassland botanical diversity is generally very low”, and dead wood is frequently removed. These parks also differ from Chillingham in that winter grazing in National Trust parks is relatively unusual; also, heathland was not present in the 26 parks surveyed.

Scientific and technical developments

By 1989, new genetic techniques involving analysis of mitochondrial DNA and non-functional, highly diverse genes (microsatellites) were being used to deduce relationships among breeds (Hall, 2004). Many questions about UK cattle breeds are yet to be answered and the affinities of the Chillingham cattle are still not known, but it is clear that they are indeed very homozygous and genetically uniform (Visscher et al., 2001). Historical accounts of inbreeding and genetic bottlenecks are thus substantiated. This genetic uniformity may mean they lack genetic variation for disease resistance and they might be particularly susceptible to disease challenge.

The history of inbreeding may be a factor in the high proportion of dental anomalies that have been revealed in recent post-mortem studies of the cattle (Ingham, 2002).

Current reproductive technologies are being applied in a programme of embryo recovery which is under way in the reserve herd (Hall et al., 2005).

Governance

In 2004 and 2005, CWCA modernized itself with a new memorandum and articles of association, VAT registration, and appointment of a part-time Park Manager to relieve Trustees of practical management tasks. Professional help has been secured for the appeal and for the HLS application. The Charity Commissioners provide advice on good management practice and CWCA has responded by improving its financial systems, instituting a risk register, producing a six-monthly newsletter for members, and other innovations.



The warden with a group of visitors

Projects

Funding is generally easier to obtain for clearly defined projects than for endowments or day to day running expenses. Areas of activity at Chillingham which have been underfunded in the past and which under modern conditions urgently require attention are education and infrastructure.

Education

With 141 first schools and 15 high schools (state sector) in Northumberland, and a total school roll of 47,877 (Northumberland County Council, 2004) there is potential for development of school visits to Chillingham. If every child makes one visit in his or her school career, there would be 4,000 visits by schoolchildren to Chillingham per year, which is within the capacity of the park and its facilities. Such visits would have to contribute clearly to the aims of the national curriculum. In principle, learning outcomes relating to history, geography and biology could all be addressed. However, development work of this kind is not provided for under the HLS scheme and would be eminently suited to support from a charity with educational aims.

Infrastructure

There are many improvements that could be made at Chillingham and a primary aim is to avoid detracting from the general atmosphere, which is redolent of a mysterious and romantic past. Habitat restoration would be of high priority and is a main concern of the HLS. Visitor facilities are another area. Most “wildlife attractions” offer much more elaborate facilities than does Chillingham. Another key issue relates to sheep grazing, which is not within the control of CWCA.

Conclusions

As the Chillingham operation has made the transition from private funding to charitable organization, so it has increased in the degree of accountability expected of it. This process is a necessary accompaniment to the seeking of public funds. The breadth of its activities has increased, and it has had to ensure compliance not only with legal requirements but also with public expectations of a conservation operation. CWCA is committed to meeting these requirements while retaining the unique features of the Park and the wild cattle whose conservation was the reason for its establishment in 1939. Reconciling these potentially conflicting requirements is an increasingly prevalent challenge in countryside conservation.

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