12.PROOF OF EVIDENCE OF WILLIAM COLEMAN, on behalf of the Chailey Commons Society

Chailey Commons Society

Our Society, as a local social group in Chailey since 1964, is concerned with the interests of all who use the Commons legitimately and responsibly, with any threats to the Commons and alerting the appropriate authorities accordingly, and to spread knowledge and understanding on and about the Commons to its present and future membership and interested parties.

Our Membership has grown again during 2009 and is currently 338, drawn from Chailey and surrounding villages and is available to anyone interested in the Commons, Ecology and Biodiversity. We keep in touch with our local communities through various monthly Parish magazines, and send out regular newsletters and provide an annual report of our activities and survey results on the Commons to our members. We encourage, in partnership with the Ranger Service, an understanding of the management of the Commons, which is handled by the Chailey Commons Management Committee, upon which we are represented. We have recently set up a Group Membership for those who wish to become involved, such as local Scouting Groups, and through this we are able to offer a more tailored Membership, such as special group walks and talks. Our aim is to give members the benefit of belonging to a local Society, dedicated to our most valuable local asset, and the added value which it brings to their participation in our Society.

We are actively involved in welcoming a new membership from the New Heritage Way, North Chailey housing development, and the integration and education will be followed as required. We acknowledge financial help through funds provided as part of the Section 106 payment with the Lewes District Council.

We are, hopefully, continuing to build on the good work achieved to date by everyone involved in the Society, both past and present, and we believe we have set out realistic objectives and provide a regular programme of Walks and Events such as Bird, Butterfly and Flower Walks and an Annual Fungi Foray and indoor winter meetings with speakers. This has given us a good solid base on which to continue, and we acknowledge the help and support of local organisations including the Chailey Parish Council.

Our recent progress includes new sub groups with special interests such as an 'Archaeology Group' under Linda Ball. This Group continues with walks, research and seeking information through speaking to those with valuable memories for recent lifetime history, or through the help of the County Archaeologist's Office for earlier history and details. We already have a records base of maps and plans which reveal much of the story of the Commons and this will be enhanced and developed, and folder displays will be used. Projector display of records will make information available to Members and Meetings.

Our Vice-chairman is working on a detailed photographic study of the commons, and through pictures and research will be developing further ways in which our members can find out more about the commons, and regular fixed point photography and online photo libraries will record the details.

We have started a Portfolio of 'Walks Leaflets' for the individual Commons, to be available at local social points such as Pubs and Tearooms, to help those who visit and seek a short

local walk whilst visiting Chailey. A further in depth leaflet is planned to give more detailed information on our Lowland Heathland, its restoration and uses, and this will be for open days and exhibitions etc.

As part of our commitment to Educational Work and Ecological Survey Support, we hope to provide some training support, with the help of the Sussex Wildlife Trust courses, for members to bring their knowledge up to date, so that our survey work, published in our Annual Report, remains focused, accurate and beneficial, and, in return, supports the Records Database held by them.

Our annual surveys, in rotation, of the Commons continue, thanks to our many knowledgeable helpers who freely give of their time and expertise.

We have set up a Website – www.chaileycommons.org.uk . which gives everyone a wider look at our Society and records our progress.

We support the current Application for Fencing for Grazing on the commons and believe that this is the way forward to restore and conserve the Lowland Heath. In a survey carried out for an earlier Grazing application over 400 members and public added their support, and we have spoken to members at meetings throughout the current application period and find their support continues. We appreciate that the area of common land concerned is under threat and is a national asset and deserves to be protected from further decay, and acknowledge the very detailed and well researched proposals, so well presented and put forward, by the East Sussex County Council. We understand the reluctance for change by some people, but, as is shown at other LNR and SSSI sites in our county and beyond, such actions bring forth enormous benefits and stability to the threatened areas, and those concerned will realise the benefit to the local community, and for future generations.

William Coleman
Chairman
November 2009

13.PROOF OF EVIDENCE OF ISOBEL ALONSO, on behalf of Natural England

Personal background

13.1. I am Dr Isabel Alonso. I have a degree in Biology, the equivalent to an MSc and a PhD from the University of León (Spain), both with Honours. Both my PhD thesis and my MSc thesis investigated pastoral systems and their management in Spain. I have worked for Natural England (previously English Nature) for eleven years as the national Heathland specialist, currently based in the Evidence Team. My job is to overview and advise on the conservation of lowland heathlands in England, although part of my job has also a UK and even European remit. I am involved in a wide range of activities including the conservation of designated heathland sites, the restoration and re-creation of the habitat, development and update of the guidance to monitor its condition, research projects and policy development. To this end I have written reports and papers and given presentations to various national and international fora on the importance, status and future of lowland heathlands in the UK. I have attended all National Heathland Conferences and European Heathland Workshops since taking this job.

13.2. I am chair of the UK Lowland Heathland Lead Co-ordination Network, the group of Country Agencies' heathland specialists and I provide secretariat to the Lowland Heathland Biodiversity Action Plan steering group and I am a member of the new Biodiversity Integration Group – Lowland farmland, which includes lowland heathland.

13.3. I am also a member of the following professional associations: Institute of Ecology and Environmental Management; British Ecological Society; Marie Curie Fellowship Association; and AEET (Spanish Association of Terrestrial Ecology).

13.4. The views expressed in this evidence are my opinions as a heathland ecologist with the remit to advise Natural England on the best options to manage a designated heathland site.

13.5. I make this statement in order to give an overview of the nature and importance of lowland heathland generally. I discuss the features that contribute to favourable, and unfavourable, condition and the various management options available to us.

Importance of lowland heathlands in the UK, and current threats

13.6. The term "lowland heathland" has a broad meaning and refers to a mosaic of wet, humid and dry habitats, characterised by dwarf shrubs of the family *Ericaceae* (heathers). Some heathlands occur naturally under extreme conditions of temperature and exposure, where they are the climax vegetation. However, most heathlands in the UK appeared after forest clearance, several thousands of years ago. Lowland heathlands are therefore cultural (not natural) landscapes on acidic, nutrient-poor soils which owe their appearance to human use over centuries. They are a rare habitat, only occurring in a restricted area in Western

Europe. It is estimated that the UK has about 20% of the world resource (Anon 1995[8]). Besides heathers and gorses, lowland heathlands also comprise areas of trees, grassland, bare ground and wetlands. They were maintained and expanded as a result of human activities, including the grazing of domestic animals, cutting of vegetation for construction materials, peat and fuel (Webb 1986[9]). This continuous management on the poorest soils halted the natural succession towards woodland, resulting in vast expanses of open habitat in many areas of lowland England, with great biodiversity value. Without management, heathland becomes woodland within a few decades or it is invaded by homogeneous-looking mats of grasses, bracken or other invasive species. The rare and characteristic species are then lost and more generalist and common species may take their place, resulting in an overall loss of the diversity of living forms.

13.7. It is estimated that there were around 350,000 ha of lowland heathland in the UK in the 1800s of which only about 16% remains today. The main causes of their destruction were afforestation, agricultural improvements and urban development, especially since the early 20th century. As a result, large heathland expanses in England were progressively reduced and fragmented. Even where heathlands remain, the cessation of traditional management practices, such as grazing, cutting, burning or removal of wood, has resulted in degradation through the invasion of bracken, scrub and trees.

13.8. Lowland heathland is now a threatened habitat which is protected internationally under the EC Habitats Directive. At national level, the UK Biodiversity Action Plan has driven the efforts on heathland conservation by aiming to maintain, and improve by management all existing lowland heathland (>94,000 ha); and to re-establish by 2015 of a further 7,600 ha of heathland, mainly by linking existing patches and creating larger sites.

13.9. The Department for Environment, Food and Rural Affairs (Defra) has set a Public Service Agreement target to bring 95% of England's SSSIs into favourable or recovering condition by 2010. Several units in Chailey Common (nos. 1, 3, 5 & 7) are currently assessed as being in unfavourable declining condition (unit 8 is in unfavourable no change condition). Thus, improving the ecological status of this site by heathland restoration work will contribute to meet this, and other biodiversity targets.

Ecological importance of the Sussex heaths

13.10. The Sussex heaths have common characteristics with others throughout Hampshire (north) and Surrey due to their occurrence in similar geological outcrops in the Wealden Greensand and the High Weald. These heathlands are more continental in character than the more oceanic Dorset heaths (Webb 1986).

13.11. The cessation of grazing by livestock and rabbits and the ending of other management activities over a period of decades has resulted in the invasion of scrub and birch woodland, which now causes serious conservation problems (Webb 1986).

[8] Anon (1995) Biodiversity: the UK Steering Group report. Two volumes. HMSO, London.

[9] Webb, N., 1986. Heathlands. A natural history of Britain's lowland heaths, Collins, London

13.12. There are few heathlands in the Low Weald and Chailey Common is one of the largest remaining sites. It comprises mainly acid and marshy grassland and wet and dry heathland, as well as small seasonal streams. Large areas are invaded by bracken *Pteridium aquilinum* and/or birch scrub. The dry heath is dominated by heather and bell-heather with wavy hair-grass *Deschampsia flexuosa* and purple moor-grass *Molinia caerulea*. The wet heath is characterised by the presence of cross-leaved heath *Erica tetralix* and Sphagnum mosses and also contains colonies of marsh gentian *Gentiana pneumonanthe*, an uncommon species in the county.

13.13. When Chailey common SSSI was first notified, there were several notable species of butterflies: the silver-studded blue *Plebejus argus*, grayling *Hipparchia semele*, pearl-bordered fritillary *Boloria euphrosyne*, small pearl-bordered fritillary *Boloria semele* and high brown fritillary *Argynnis adippe*. The breeding bird community included nightjar, stonechat, tree pipit and cuckoo.

Monitoring the condition of lowland heathlands

13.14. Some of the best examples of lowland heathlands in the UK have been designated as Sites of Special Scientific Interest (SSSIs). For each one, the main features, or reasons why the site was designated, are described in the designation documents. The advisors in charge of a site have to write Conservation Objectives for those features and then assess their condition in a standardised manner across the UK following the so-called "Common Standards for Monitoring (CSM)". The CSM were developed by the conservation agencies' specialists in each habitat or species group and have been tested and updated over the last eight to ten years.

13.15. In the case of lowland heathlands the attributes that define the Conservation Objectives are: bare ground, vegetation structure, vegetation composition and negative indicators (JNCC 2009[10]). In general terms the objectives will be:

- To maintain a certain amount of bare ground which is important for plants, invertebrates and reptiles;
- To maintain a proportion of dwarf shrubs versus grasses;
- To maintain a balance of heather age classes across the site, from pioneer to mature and degenerate;
- To maintain a variety of dwarf shrub species, graminoids (grass-like species), flowering plants, bryophytes and lichens;

[10] JNCC (Joint Nature Conservation Committee) 2009. Common Standards for Monitoring Guidance - Lowland Heathland (version February 2009). http://www.jncc.gov.uk/pdf/0902_CSM_lowland_heathlandv2.pdf

- To limit the cover and spread of some species such as trees, scrub, bracken, invasive grasses such as purple moor-grass *Molinia caerulea*, indicators of eutrophication, erosion or other damage to the site.

13.16. Specific targets have to be defined for each site. These targets and Conservation Objectives will inform the management requirements and options. Management of lowland heathlands will aim to achieve those objectives, i.e. maintain dwarf shrubs in various growth stages; create a diversity of habitats for characteristic heathland species and remove; and control invasive species. Added benefits are that it prevents the accumulation of soil nutrients and decreases fuel load thus preventing wild fires.

Management options

13.17. There are several management options to maintain the open character of the heathlands. However, the choice of techniques will depend on the requirements and circumstances of the individual site. Dealing with dense gorse, bracken or tree stands require a different set of techniques. The table below shows some of the pros and cons of each one (for a full list see Symes & Day, 2003[11]; other references are Webb 1986; Gimingham 1992[12]):

	Pros	Cons
Cutting the vegetation	Effective in dry and humid heath; Suitable where it is not possible to burn; Allows better control than burning; Not weather dependent; Material can be used for heathland restoration;	Material needs to be collected, removed and disposed of; Slower and more expensive than burning; Not suitable for rocky terrain; Removes less nutrients than burning; Produces a uniform sward height; Not suitable to create bare ground.
Burning	Suited to many situations; Quick, cheap; Removes nutrients; Removes most above-ground living biomass; Controls trees & scrub; Provides fresh forage for grazing animals;	Not recommended in small sites with sensitive features such as reptiles or lichen heath; Rarely acceptable in urban or suburban sites; Favours species that can resprout from underground organs; Weather dependant; Produces even stands;

[11] Symes, N., Day, J., 2003. A practical guide to the restoration and management of lowland heathland, The RSPB, Sandy.

[12] Gimingham, C.H., 1992. The lowland heathland management book, English Nature Science No. 8, Peterborough.

		High risk if not controlled properly;
Removal of turf	Creates bare ground and removes nutrients;	Could damage the soil and archaeological values; Very labour-intensive;
Grazing	Effective in developing and maintaining finely varied vegetation stand structure and plant diversity; Controls vigorous grass species; Reduces nutrients; Extends the period between cuts or burns;	Reptiles are vulnerable to damage to structure of dry, mature heath; Potential impact on nectar sources; Associated fencing may be controversial locally.

Grazing lowland heathlands

13.18. Until relatively recently, European heathlands played an integral part in the economy of their respective rural communities. Grazing, often by livestock owned by commoners, provided local and sustainable supplies of meat, milk, skins and other animal products. This form of management restricted the level of scrub invasion and created many ecological niches for plants and animals.

13.19. However, during the last century, developments in agriculture led to heathlands losing their economic value and being abandoned. In turn, this led to the decline in both the quality and quantity of heathlands in the UK today. Scrub is widespread, as are homogeneous-looking stands of bracken and some grasses. In the last decade or so there have been many projects aiming to restore the extent and condition of lowland heathlands by reinstating traditional management practices, including grazing.

13.20. Grazing alone is unlikely to produce the condition we aspire for lowland heathlands, but in combination with other techniques can result in a greater diversity of habitats and therefore in a greater diversity of living forms. A modern interpretation of traditional heathland grazing could still be economically profitable, linked to organically-produced meat.

13.21. English Nature (now Natural England) published a detailed review of the impacts of livestock grazing on lowland heathland in 2001 (Lake et al 2001 see John Day reference no. 15). Some of the conclusions of this report were that:

- Grazing can be used to deliver the conservation objectives for lowland heathlands;

- Grazing can produce a mosaic of micro-habitats which helps to maintain the richness and diversity of heathlands. This is the main benefit of grazing and it would be very difficult, if not impossible, to achieve through burning or cutting alone;
- Grazing can control, to some degree, invasive species such as weeds, scrub, bracken and purple moor grass;
- Grazing can help reducing nutrients from the system, thus contributing to restrict the opportunity for invasive species to establish.
- The negative impacts of grazing are usually derived from inappropriate grazing regimes, such as: overgrazing; undergrazing; wrong time of the year; lack of initial impact assessment on other species or features.

13.22. Lake et al (2001) also indicates that burning and mowing alone cannot provide the diversity created by selective grazing and habitat use (dunging, trampling and poaching). Pywell et al (1995[13]) comparing grazing, mowing and burning in various heathland sites in southern England found that grazed areas were botanically richer, particularly low-growing and small forbs and grasses.

13.23. Burning and mowing may not be advisable in very wet heathland areas though some livestock can graze such areas.

Conclusion

13.24. In my role as a national specialist in heathland ecology I have visited many heathland sites across the country which are grazed and have been in numerous discussions on the subject. I have come to the clear conclusion that extensive livestock grazing, with the appropriate number and type of animals, is an important tool in the conservation of these important conservation sites. In my view a site that is as large as Chailey Common can realistically only be brought into favourable condition by way of management that incorporates sustained extensive grazing by livestock.

[13] Pywell, R.F., Bullock, J.M., Pakeman, R.J., Mountford, J.O., Warman, E.A., Wells, T.C.E., Walker, K., 1995. Review of calcareous grassland and heathland management, MAFF/NERC contract, Abbots Ripton

14.PROOF OF EVIDENCE OF DR JOHN DAY, on behalf of East Sussex County Council

SUMMARY

a) My name is John Day. I have a first degree and a research degree, I am a chartered biologist, a chartered environmentalist and a retired chartered surveyor. For most of my career I worked for RSPB and I am now a director of a firm of environmental consultants. I have many years experience in research and management of heathlands and involvement in commons issues.

b) Chailey Common, which has three owners, is subject to Scheme of Regulation by Lewes District Council under the 1899 Commons Act and is a Local Nature Reserve managed by East Sussex County Council through a local management committee. ESCC employs a ranger to carry out management work on the common.

c) There is considerable evidence that the common was grazed by cattle until the mid-20th century, but that grazing ceased in the 1950s or1960s and the common which was formerly open heathland, has since become overgrown, and has reverted to rough grassland or is succeeding to woodland and scrub. These changes have been accompanied by losses or declines in populations of key species of plants, birds and invertebrates to the detriment of the biodiversity of the site.

d) Chailey Common was designated as a Site of Special Scientific Interest in 1954 for its heathland and associated species of flora and fauna. Currently some 83% of the area of the Common within this application is in unfavourable condition and Natural England regards the introduction of grazing as being essential to remedy this.

e) Formerly, the heath would have been kept open by intensive management including grazing accompanied by burning, and the cessation of this management combined with increases in atmospheric nitrogen inputs have driven the ongoing conversion to grassland or woodland and scrub. Recent management has not been successful in the absence of grazing, in arresting these changes, and without a sustainable management regime including grazing, future resources for management are in doubt.

f) Evidence from research shows that with an appropriate livestock regime, trampling and grazing will increase species richness and diversity, reduce nutrient levels, reverse the change from heather dominated communities to grassland, and create suitable mosaics and niches for the associated flora and fauna of heathland habitats. Most of the species which have disappeared from the common in recent decades are associated with grazed habitats. There is a wide measure of agreement among heathland managers that grazing is beneficial in achieving conservation objectives and grazing is the chosen method of management on heathland across the UK and N-W Europe.

g) Reintroduction of extensive grazing on Chailey Common would be based on perimeter fencing with low stocking rates by traditional hardy and docile livestock breeds. Steps would be taken to institute a grazing scheme that is compatible with the existing public access to the site, and to reduce the risk of road accidents. Part of the common would be free of livestock at any one time for visitors who wished to avoid grazing animals.

h) Apart from benefits to wildlife, grazing will open up the Common for access by people, restore views across the common and to the surrounding countryside and reduce the fire risk. The perimeter fencing will improve safety for children, dogs or loose horses on the common.

i) The introduction of a grazing scheme facilitated by fencing will assist in achieving the Government PSA targets for favourable condition on SSSIs, help the County Council meet its obligations as a section 28G authority under the 1981 Wildlife and Countryside Act and improve the chances of obtaining financial support for future management of the common under the Higher Level Stewardship scheme.

j) The proposed scheme has been the subject of comprehensive consultations including postal distributions, leaflet drops, publicity in local newsletter and magazines, press articles, drop-in days and website insertions.

k) Careful consideration has been given to alternative means of introducing grazing, including tethering, shepherding, enclosures and temporary fencing. It has been concluded that permanent perimeter fencing with cattle grids on two minor roads crossing the common is the most effective way of managing extensive conservation grazing whilst benefiting the landscape, amenity and access and the interests of the neighbourhood.