

Committee(s):	Date(s):
Epping Forest Management Plan Steering Group Epping Forest & Commons	13 th November 2013
Subject: Epping Forest Grazing Monitoring Audit	Public
Report of: Superintendent of Epping Forest	For Decision

Summary

This report describes the latest monitoring work on grazing and provides the second annual assessment by the Independent Grazing Assessor, Dr Peter Dennis of Aberystwyth University (Committee Member & Secretary of The Royal Society's UK Biodiversity Science Committee (UK BSC)). The Assessor's independent audit report is appended at **Appendix 2** and his key points are summarised in this main report.

The Assessor is satisfied with the Grazing Strategy's phased approach although he recognises that it has moved at a slower pace in 2013 than anticipated due to external and infrastructure constraints. He considers the current combination of monitoring methods provides "*..a suitable and effective monitoring programme*". He inspected the 8 additional transects and regarded their length and location as appropriate but suggests some additional techniques, including Centre-pole Fixed Point Photography as an economical way of garnering extra vegetation data.

The annual costs of continuing the monitoring programme, with some of the additions covered in this report, would come from local risk budgets and would amount to up to £12,000. In addition the work involved in the assessment is likely to cost between £3,000 - £3,500 in the next financial year.

In response to survey proposals by the Head of Conservation (summarised in a report at **Appendix 1**) Dr Dennis concludes with some suggestions for future projects and survey work. He outlines the extra resources that might be required for these and suggests a phased timetable for survey work is required to match available resources. He recommends seeking public engagement with monitoring projects where possible.

Recommendation(s)

Members are asked to:

- note the report;
- approve the production of a 3rd report by the Grazing Assessor to be provided to the Management Plan Steering Group for consideration prior to being submitted to Committee in November 2014

Main Report

Background

1. The appointment of an Independent Grazing Assessor was approved in July 2010 (EFCC Report SEF 21/10) to give an objective overview of the way in which the impacts of grazing are to be measured and monitored.
2. The role of the Independent Grazing Assessor was approved to cover the following areas:
 - to analyse the current ecological monitoring of grazing at Epping Forest;
 - to provide advice on additional or alternative monitoring that could be viably achieved;
 - to provide additional knowledge from comparable sites and situations;
 - to provide the Superintendent with an annual validation report on the ecological monitoring.
3. The Assessor's 1st report was received by Committee in November 2012 and a return visit by him to the Forest was approved.

Current Position

4. This report follows the visit on 21st and 22nd August by the Assessor who re-visited all the monitoring sites and viewed the impacts of the cattle for himself, both the Redpoll herd at Fairmead and the English Longhorn herds at Chingford and Sunshine Plains.
5. In his report he states that he remains satisfied with the phased approach of the Grazing Strategy, which he regards as "*sensible, gradual and precautionary*". He emphasises the importance of the monitoring programme to allow adjustment of management in order to achieve the objectives for each site and the primary objective of favourable condition
6. On his visit to the Forest Dr Dennis examined the 8 new transects that had been added to the monitoring programme in 2013 and concludes that they are appropriate in length and location. He recognises that increasing the number of such transects based on the level of quadrat sampling is not possible given current resources but suggests several additional techniques which should be considered to increase the information yielded from the grazing and non-grazing areas.
7. These additional techniques and other approaches have been incorporated by the Head of Conservation into an outline 5-year plan for monitoring, which is attached as **Appendix 1** to this report. Some of the additional monitoring will be dependent on resources at the time (e.g. student projects, volunteers and

public engagement) but other monitoring will need to be completed before grazing is re-established (e.g. Deershelter Plain's western scrape).

8. Based on his review of the analyses (carried out by consultant Dr Clive Bealey) of the long-term monitoring data gathered by the Epping Forest monitoring programme from one heathland and one grassland site, Dr Dennis suggests some additional data that should be gathered in future to refine the resolution of the analyses. For example, he recommends that *Sphagnum* species should be separately identified on the wet heathland sites so that favourable condition of the vegetation can be more accurately assessed. *Sphagnum* species are key indicators for certain specific nationally-recognised vegetation communities, which are a recognised feature of Epping Forest Site of Special Scientific Interest's favourable condition.

Options

9. In response to discussions with Dr Dennis and his report, and to a dialogue with Dr Clive Bealey who analysed some of the long-term datasets this year, the Head of Conservation has outlined a 5-yr plan (**Appendix 1**), which is to be used as a basis for planning the scope and timing of future monitoring.
10. Opportunities will be sought to engage volunteers; a photographer has already been approached for the fixed point photography. A programme of student projects will also be developed for grazing monitoring, although this will also require the collection of significant amounts of baseline data beforehand to provide the students with a platform for their own research and analyses.
11. The fieldwork will have to be phased over the 5 years to ensure that the Forest's ecologist and others can achieve the fieldwork. Some additional assistance will be required each year (as now) for fieldwork and analysis and the costs for this are likely to be between £7,000 - £12,000 annually depending on the number of sites, the detail or technicality of the surveys and the level of statistical analysis involved. In addition the costs of the Grazing Audit Report will also need to be included and depending on the level of detail and length of the visit this work is likely to cost between £3,000 - £3,500.
12. In recent years the City Bridge Trust funding has supplemented the Forest's local risk budget and enabled the survey work and analyses to be achieved. In future years, sources of funding will need to be considered as well as the local risk budget.

Proposals

13. It is proposed to continue with the current level of monitoring of the existing vegetation quadrats and invertebrate pitfall traps. It is vital that annual recording is maintained during the re-establishment phase of the grazing.
14. In addition, the 8 transects established this year need to be re-surveyed so that the amplitude of vegetation variations can be established. Additional fixed point photography will be established as proposed by Dr Dennis.

15. Of the other possible monitoring it is recommended that the Heath Spotted Orchid population is mapped in detail at Long Running to provide baseline data for future student projects and also to assess the impact of deer and cattle grazing. The essential monitoring of Deershelter Plain scrape is proposed for 2015. A re-survey of Sunshine Plain vegetation quadrats will be considered for either 2014 or 2015, dependent on resources, and will include more detailed recording of the Sphagnum species.
16. Desirable monitoring of animal species (e.g. invertebrates) will be considered but will be dependent on resources and availability of students. As the GPS tracking of the cattle gathers more data this will be stored as a baseline for future student projects in which Dr Dennis has expressed particular interest based on his work with GPS elsewhere.

Corporate & Strategic Implications

17. The options and proposals in this report meet the *City Together Strategy* by contributing to “*a world class City that promotes and enhances our environment*”. In relation to the Open Spaces Department’s Business Plan Improvement Objectives this report fulfils the objective to “*promote sustainability, biodiversity and heritage*”.

Implications

Legal Implications

18. There are no legal implications associated with the proposals in this report.

Property Implications

19. There are no property implications associated with the proposals in this report.

Financial Implications

20. The costs of any monitoring work and the grazing assessor’s time will be taken from local risk budgets as available and as in previous years.

HR Implications

21. Any monitoring volunteers, including the photographer recruited in 2013, are recruited through the volunteer scheme by the Volunteers Development Officer and would be supervised, as required, by members of the Conservation Team.
22. There are some HR cost implications associated with the Grazing Audit report, as well as the additional fieldwork and analysis proposals. These costs will need to be met from any future City Bridge Trust Grant or from the Local Risk Budget.

Conclusion

23. This report summarises both the findings of the Independent Grazing Assessor and the outline of a 5-year monitoring programme to continue to assess the impacts of cattle grazing on Epping Forest (see attached appendices for further detail). The Assessor, Dr Peter Dennis, considers that the current level of monitoring, including new transects added in 2013, provides a suitable and effective monitoring programme. A third audit report by the Assessor in 2014 is recommended for approval.
24. Additional avenues and techniques for monitoring are explored in both reports and both the use of less labour-intensive techniques, such as fixed-point photography and “W-walks”, and the engagement of the public through volunteering and student projects are seen as effective ways of increasing the scope and amounts of information gathered on grazing impacts.

Appendices

- Appendix 1 – *Proposals for future Monitoring to Measure Impacts of Grazing at Epping Forest* by Dr Jeremy Dagley, Epping Forest Head of Conservation, September 2013.
- Appendix 2 – *Grazing Assessor’s report on status of cattle grazing and associated monitoring across Epping Forest* by Dr Peter Dennis, University of Aberystwyth, 26th September 2013.

Background Papers:

- *Epping Forest Grazing Strategy 2006 (updated for Branching Out Project in 2008)*
- *SEF 25/07 EF&C Committee report on: the 2nd Public Consultation on Grazing*
- *SEF 21/10 EF&C Committee report on: Ecological Monitoring Programme for Grazing*
- *SEF 35/12 EF&C Committee report of 5th November 2012: Epping Forest Grazing Monitoring Audit*

Dr Jeremy Dagley

Head of Conservation, Epping Forest

T: 020 8532 5313

E: jeremy.dagley@cityoflondon.gov.uk

-----oo00oo-----