Committee:	Dated:
Epping Forest Consultative	20/10/2021 For consultation
Epping Forest & Commons *	15/11/2021 For Decision
Subject: Conservation Grazing Action Plan for Epping	Public
Forest & its Buffer Lands	
(SEF 46/21b)	
Which outcomes in the City Corporation's Corporate	11 and 12
Plan does this proposal aim to impact directly?	
Does this proposal require extra revenue and/or	No
capital spending?	
If so, how much?	N/A
What is the source of Funding?	Local Risk
Has this Funding Source been agreed with the	Yes
Chamberlain's Department?	
Report of: Juliemma McLoughlin, Executive Director,	*For Decision
Environment Department	
Report authors: Jeremy Dagley, Head of Conservation -	
Epping Forest and John Phillips, Grazing & Landscapes	
Project Officer	
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Summary

This report provides both a review of the progress of the in-house grazing management since 2016 and a preview of the aims for the next 5 years. The review demonstrates that expectations in terms of cattle grazing days and the range of sites grazed have been met or exceeded. GPS technology has allowed the virtual fencing management to be updated from the original technology and at little direct cost. The preview of the next 5 years concentrates on increasing the reach and effectiveness of cattle grazing, with the aim of maintaining a herd of more than 200 animals. The effectiveness will be gauged in terms of enhancement to the condition of both the ancient wood-pasture of the Forest and the proposed new or restored wood-pasture and parklands of the Buffer Lands. There is also an emphasis on involving more of the Forest's local communities in the grazing project and enabling them to appreciate grazing's essential importance to the continuity of landscape and enhancement of biodiversity in a rapidly changing environment.

Recommendation(s)

Members are asked to:

- Approve the eight key aims of the Conservation Grazing Action Plan 2022-2027, subject to future liaison with commoners in 2022.
- Approve the option of winter grazing in selected parts of the Forest woodpasture habitats for enhanced biodiversity conservation, subject to feedback from liaison with commoners and subject to Section 5(2) of the City of London (Open Spaces) Act 2018;

- Delegate to the Superintendent of Epping Forest (in consultation with the Chairman and Deputy Chairman of Epping Forest and Commons Committee) authority to consider any liaison feedback from commoners and to determine whether the key aims and winter grazing should be approved as set out in the above recommendations having regard to any such feedback and further delegate to the Superintendent of Epping Forest (in consultation with the Chairman and Deputy Chairman of the Epping Forest and Commons Committee), in each year winter grazing is proposed, authority to take reasonable steps to ascertain the extent to which relevant rights of common are likely to be exercised in that year and to ensure a sufficient area of land is maintained so as to allow for the exercise of those rights to the extent they are ascertained (in accordance with S.5(2) City of London (Open Spaces) Act 2018)
- Approve expansion of the GPS collar management under the Action Plan, as resources allow, to provide collars for each animal in the herd to allow for fenceless grazing by any animal across the Buffer Lands and Forest.

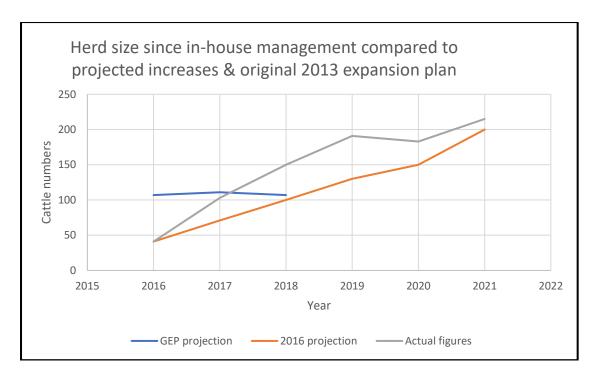
Main Report

Background

- 1. The Forest is one of the largest and most important wood-pasture sites in Britain. As a SSSI, it is the only one to support all three lowland wood-pasture vegetation types in the statutorily-protected series of sites. Furthermore, the Forest's heathlands, which form part of its wood-pasture mosaic, are 'qualifying habitats' under its Special Area of Conservation (SAC) designation. Grazing is essential for the management of all these habitats and for the Forest's favourable condition.
- 2. The 30-year Grazing Strategy (see *Background Papers*), approved in 2006 and subsequently an integral part of the *Branching Out* Project (2008 2014), provided the detailed rationale and proposals for re-establishing naturalistic, extensive conservation grazing across key Forest sites.
- 3. In 2011, the pioneering adoption of the first commercially available invisible fencing technology, coupled with the installation of four new cattle grids two years later under *Branching Out*, allowed the extensive grazing of the central Forest wood-pasture areas at Fairmead and Chingford to be fully re-established.
- 4. In addition to the four cattle grids funded by the Heritage Lottery Fund (HLF) and Essex County Council Highways, the HLF through the *Branching Out* project also contributed significantly to the provision of 7km of wooden fencing along the two main A-roads, the A121 and A104, and to the construction of new winter cattle housing at Great Gregories.
- 5. The conservation grazing herd of Longhorn cattle was bought in 2011, initially to be managed by a contractor on behalf of the Conservators. However, in 2016 your Committee approved the change to in-house management (see *Background Papers* Report SEF50/16 below). This report reviews progress against that 2016 report and provides a preview of the proposed grazing arrangements to 2027.

Current Position

- 6. The current in-house English Longhorn herd size is 175, with an additional 60 calves expected this winter (28 of which have been born at the time of this report), ensuring a herd total of over 200 animals for 2022. The herd is managed by an experienced stockperson and by the Grazing & Landscapes Project Officer, alongside assistance from other staff and volunteers.
- 7. Since 2016, the grazing project has met or exceeded the projected targets set out in the 2016 report (see *Background Papers*) for cattle numbers and, thereby, exceeded the projected capital asset value of the pedigree herd (see Figure 1 below). Furthermore, costs management has bettered projections over this period and, even in 2021, the current in-house grazing service costs remain lower than the comparable 2016 contractor service costs, which were already due to be increased by a significant percentage after 2016.



- 8. So far during 2021, with some remaining grazing days, around 30,000 grazing days have been achieved, despite a late spring and slow early grass growth. Of these grazing days, 4,993 have been on the Forest and 19,225 on the historic parklands of Warlies and Copped Hall. On the Forest the grazing of the in-house herd is following the current commoners' grazing season from 15th April to 15th November.
- 9. In 2019 a new invisible or fenceless grazing system based on GPS signals, *NoFence*, was trialled on the Buffer Lands within traditionally fenced areas. Following its demonstrable effectiveness in containing the cattle and the stability of the virtual fenced areas, *NoFence* was introduced for grazing on the Forest in 2020 alongside the original invisible fence system, *Boviguard*.

- 10. A successful grant bid early in 2021, working with the Rare Breeds Survival Trust, secured 100% funding for 50 new *NoFence* collars. As a result, in the 2021 grazing season, the wired *Boviguard* invisible fence system was decommissioned and entirely replaced for grazing area management on the Forest with *NoFence*.
- 11. This GPS system has allowed improved daily monitoring through interactive software and made the daily checks of cattle more efficient, saving staff time. The system also has the potential to provide important evidence for monitoring of grazing impacts, allowing the conservation management to be refined and also providing data for future Rural Payments Agency Stewardship grant inspections.
- 12. Most significantly, the new GPS system has allowed completely new areas of the important Forest habitats to be grazed in 2021 for the first time in many decades. This is because there is no reliance on wires in the ground or other static infrastructure.
- 13. Wanstead Park provided the clearest example of the advantage of the new system, with the first grazing achieved there for many decades in September 2020 and again this summer. In the case of Wanstead Park, the assistance of volunteers from The Wren Group and Friends of Wanstead Park has also been essential to the success of the operation.
- 14. Further new sites have been grazed in 2021 and these were:
 - Barn Hoppitt
 - Whitehall Plains (N & S)
 - Yates's Meadow
 - Daisey Plain & Yardley Hill
 - Long Running heath was also grazed with this system, allowing a larger area of beech-heath wood-pasture to be grazed than previously.
- 15. Of other existing grazed areas, those grazed since 2011 or earlier, have been grazed with more security and with more focused grazing for the benefit of the SSSI's flora and fauna.

Proposals

- 16. To ensure the continued implementation of the Epping Forest Grazing Strategy, this report previews the grazing action plan for the next 5 years of in-house management, with some proposed changes and enhancements. There are eight key aims presented in this report (see below para 18), plus the proposed option of future winter grazing (paras 21 27 below).
- 17. The 5-yr action plan sets out to consolidate and build on the progress over the last 5 years, since 2016, during which time the combination of the increase in the size of the cattle herd and the introduction of the more effective and flexible *NoFence* system has allowed grazing of more Forest sites, with more targeted impacts on the SSSI. The system has also allowed more targeted grazing of the historic parkland landscape of the Buffer Lands, ensuring continued external grant income.

- 18. The 5-year action plan's eight key aims are as follows:
 - a. Extensive, annual cattle grazing maintained and extended: maintain annual, extensive cattle grazing to ensure dynamic habitat conservation and favourable condition of Epping Forest's wood-pasture and the Buffer Lands' parklands and extend the grazing to new sites (see below) in line with the target areas of the approved Grazing Strategy 2006 and subject to Section 5(2) of the City of London (Open Spaces) Act 2018.
 - b. Responding to climate change and grazing dependent fauna: consider options to improve conditions for habitat continuity for dung-dependent fauna and provide flexibility of management in the face of climate change, including year-long grazing season (see separate winter grazing proposal below)
 - c. 12K grazing days target: Maintain a herd of >200 animals over the next 5 years and aim to increase to between 250-350 animals in the long-term, as resources allow, to achieve up to 12,000 annual grazing days on the Forest, subject to evidence from ecological monitoring, and subject to Section 5(2) of the City of London (Open Spaces) Act 2018.
 - d. **Innovation for efficient use of resources:** continue to lead in the innovative use of fenceless, collar-based containment systems to reduce labour requirements, minimise impacts on public access, allow grazing across all parts of the Forest, and maintain Epping Forest's exemplar status for wood-pasture conservation.
 - e. **Greater staff involvement:** promote greater understanding of livestock management, a greater sense of ownership of the grazing action plan and direct involvement by more staff members over the next five years.
 - f. **Community participation:** increase community participation and education in grazing management and the essential role grazing animals play in our wood-pasture and parkland ecosystems.
 - g. **Minimise N pollution:** reduce the negative impacts associated with livestock using the latest technology, updated, roofed buildings and storage facilities.
 - h. **Evidence-based conservation management:** increase the monitoring of grazing impacts across the Forest and Buffer Lands to ensure evidence-based decision making for biodiversity conservation.
- 19. **New sites**: additional sites to be considered in the action plan for grazing by 2027, dependent on additional *NoFence* collars, other resources, animal welfare and site security, and subject to it being expedient for the management of the open space, may include:
 - Sheppard's Meadows, Epping
 - Wanstead Flats
 - Levton Flats
 - Patmore's Field.
- 20.**1895 Regulations review**: In addition to the above aims, the action plan seeks to update and amend the regulations around Forest grazing by commoners, as may be necessary to ensure their future effectiveness. This will be reviewed with the City Solicitor, as required, and any proposals for amendments would be brought back to your Committee for consideration under a separate report.
- 21. **Winter grazing:** the main legislative change related to commoners' grazing, since it was protected under Section 5 of the Epping Forest Act 1878 (EFA 1878),

- was made by the City of London (Various Powers) Act 1977. Under Part II Section 4(2) of the latter Act, winter grazing rights for commoners were brought to an end. Since grazing, as conservation-targeted grazing, was re-established on the Forest in 2002 with a contractor and as it has progressed under the Grazing Strategy 2006, the restrictions on winter grazing have been incorporated into the management of the project.
- 22. However, in-house grazing need not be seasonally restricted in the same way as commoners' grazing rights (see Legal Implications section below). Nonetheless, this would mark a change from the approach in the Grazing Strategy 2006 for reasons set out in the paragraphs below. As such, a consultation with commoners would be undertaken to inform them of the proposal for in-house winter grazing should it be approved in principle (see *Recommendations* above) and such liaison feedback would be taken into account in determining the conduct and extent of such grazing. In the event that no feedback is provided or the feedback does not raise significant new issues or objection, authority is sought for the Superintendent to approve the key aims and winter grazing proposals as set out in the first two recommendations. Any substantive comments would be brought back to your Committee for consideration prior to any final decision on the first two recommendations being taken by your Committee In addition, for each year winter grazing is to be undertaken, the Superintendent would take reasonable steps to ascertain the extent to which relevant rights of common are likely to be exercised in that year and to ensure a sufficient area of land is maintained so as to allow for the exercise of those rights to the extent they are ascertained (in accordance with S.5(2) City of London (Open Spaces) Act 2018.
- 23. The loss of winter grazing has almost certainly had significant ecological impacts, not only on coarser grass management and the regeneration woody species (e.g. promotion of Crab Apple germination), but through the loss of continuity of dung habitats. Dung supports a wide range of specialist fungi, insect and other invertebrates and the recycling of dung by these species is of considerable importance to soil structure and fertility. Some species have undoubtedly been lost from the Forest. The continuity of dung habitats through the year, across the winter months, is now considered to be critical to the biodiversity of the dung fauna, especially rare and declining species of dung beetles.
- 24. However, as well as re-establishing biodiversity, winter grazing is likely to become more important for a flexible response to climate change. As climate changes, the seasons in Britain may merge, with winters become unpredictable but often warmer and wetter, with a correspondingly longer growing season for vegetation. A longer grazing season is likely to be required to respond to the increasing productivity of grasslands in a warmer climate.
- 25. The increased productivity under the current significant Nitrogen (N) pollution (*Critical Load* of N) adversely affecting the Forest is another important effect, which may be partly mitigated by a longer and more flexible grazing season.
- 26. It is proposed, therefore, that only the in-house conservation grazing, which is conducted under The Conservators rights and responsibilities, should be allowed

to include winter grazing. To ensure adherence to careful habitat restoration goals and cross-compliance it is proposed to retain the winter exclusion of common rights of pasture under Section 4(2) Part II of the City of London (Various Powers) Act 1977 but to liaise with the current commoners of the change to in-house grazing proposed. (It is not considered that any requirement for a Forum referenced in paragraph 44 of this report is engaged by the proposals).

27. Any such in-house winter grazing would be required to be subject to assent from Natural England in relation to the condition of the SSSI under the Wildlife & Countryside Act 1981 (Section 28) and would necessarily be subject to cross-compliance rules. Such grazing would also be selectively targeted on sites using a low stocking rate and subject to careful assessment and daily monitoring of habitat and animal conditions for each chosen site.

Options

- 28. **Option 1:** The eight key aims of the action to be approved, alongside approval of selected winter grazing of the Forest by in-house cattle subject to liaison feedback through a commoners' consultation. **This option is to be recommended to Committee.**
- 29. **Option 2**: The eight key aims of the action plan to be approved subject to liaison feedback through a commoners' consultation but without approval of winter grazing. **This option is** not **to be recommended to Committee.**
- 30. **Option 3:** The grazing of the Forest would continue on a business-as-usual basis only without the additional aims of the action plan and without approval of winter grazing. **This option is** <u>not </u>to be recommended to Committee.

Key Data

31. Current herd size is 175 animals with around 60 calves expected this winter, 28 of which have been born at the time of this report. A total of 65 *NoFence* GPS collars are used to manage the grazing on all Forest sites and some Buffer Land areas. A total of around 30,000 grazing days have been achieved to date in 2021, with grazing continuing at three sites the time of this report.

Corporate & Strategic Implications

Strategic implications

- 32. This proposed action plan would contribute significantly to City of London Corporate Plan 2018-2023 Outcome 11: We have clean air, land and water and a thriving and sustainable natural environment and Outcome 12: Our spaces are secure, resilient and well maintained.
- 33. The aim of the grazing action plan's key aims are to support the Open Spaces Department's Vision of enriching people's lives by enhancing and providing access to ecologically diverse open spaces and outstanding heritage assets across London and beyond.

Financial implications (see also *Risk Implications* below)

- 34. Of the eight key aims, four have implications for local risk costs and these are in sub-paragraphs 18c, 18d, 18e and 18g above. The costs associated with 18g, winter housing and roofing and the maintenance of the new structures, are to be covered in a separate non-public Gateway Report to Committee. These proposals include a significant element of spend-to-save.
- 35. The increase in herd size, improved cover for the stockperson and purchase of new GPS collars (18c e) may have an impact on local risk budgets. Some outline costs are given below.
- 36. For 2021, income from animal sales and produce, plus direct agri-environment grants in the form of specific grazing supplements, amounted to over £26,000 which offsets over 40% of the feed, accommodation and animal welfare costs.
- 37. Additional, although annually declining, indirect income from the Basic Payment Scheme (BPS) will be available from 2022 until 2027. Currently, the proportion of BPS attributable to the grazed areas as an indirect grazing supplement is sufficient to cover the remaining costs.
- 38. The increase in herd size and grazing days on the Forest could be led by retaining more of the animals born into the herd but the balance here would need to be struck with winter accommodation enhancements and animal sales income generation.
- 39. In terms of *service* costs (these were the contractor costs until the management was brought in-house), the 2016 projected cost (stockperson, on-costs and vehicles) for 2020 was £67,369 (see *Background Papers* SEF 50/16 non-public report). In 2021, the actual service cost in-house is £43,657, only 65% of the predicted 2020 external contractor cost and considerably cheaper than the predicted external contractor costs would be in 2021. Looking ahead, additional cover for the single stockperson is required which would increase service costs more in line with the original projected costs above. Replacement vehicle (tractor) costs (lease or purchase) are subject to separate vehicle costs reporting.
- 40. GPS collar purchase has so far been achieved through 100% grant-aid. Future grant aid or sponsorship will be sought but otherwise an incremental increase in the number of collars would be the approach taken. Collars, which are about £300 each, would be paid for using monies from the sale of animals and the net balance of the trading account as required.

Resource implications

41. Staff resources for extra stockperson cover (paragraph 39 above).

Legal implications

42. The City Corporation may graze cattle if it considers it necessary or expedient for the proper management or husbandry of the open space (S.5(1c) City of London

- (Open Spaces) Act 2018). (The prohibition on winter grazing in S.4(2) City of London (Various Powers) Act 1977 applies only to cattle turned out pursuant to commoners' rights and, therefore, does not apply to cattle turned out pursuant to the Corporation's rights in respect of land management).
- 43. In respect of each year in which the grazing of animals is proposed in Epping Forest the City Corporation, as The Conservators, must take reasonable steps to ascertain the extent to which relevant rights of common are likely to be exercised in that year and to ensure a sufficient area of land is maintained so as to allow for the exercise of those rights to the extent they are ascertained (S.5(2) City of London (Open Spaces Act 2018)
- 44. For the purposes of the Countryside Stewardship payment received in respect of parts of Epping Forest, the City Corporation (as Conservators) completed an Internal Agreement for the exercise of Shared Grazing. Pursuant to Clause 2 of the Internal Agreement the Corporation undertook to take all reasonable steps to continue correspondence with all Commoners known to them about issues the Conservators might consider affect them. The Internal Agreement further provides that a Forum may be initiated in certain circumstances to promote liaison with commoners, any such Forum to include representatives from Natural England and other stakeholders.

Risk implications

45. Reduction or loss of grazing would impact adversely on the condition of the Forest, especially the SSSI/SAC, and the historic Buffer Lands parklands. The Countryside Stewardship agreement would also be impacted, with loss of grant income. There would also be significant implications for grant claw-back measures under the conditions of the HLF grant received to support grazing activities in the *Branching Out* Project, for which legacy conditions apply.

Equalities implications

46. There are no immediate equalities implications in this report.

Climate implications

- 47. The conservation grazing is critical to the maintenance of the Forest and Buffer Lands biodiversity. The biodiversity crisis is inextricably linked to the climate crisis. Although ruminant animals like cattle produce methane and nitrous oxide, which contribute to the greenhouse gas emissions at Epping Forest, this should be set against the biodiversity gains and ecosystem restoration provided by cattle grazing. In addition, the grazed grasslands usually require no, or significantly less, mechanical intervention using fossil fuelled vehicles.
- 48. In addition, cattle grazing is important in the maintenance of significant soil carbon stores, which underly the grasslands and wood-pasture habitats. Cattle grazing is also key to the dynamics of natural regeneration of scrub and oaks in wood-pasture restoration and creation, both of which are critical to Epping Forest's future resilience to climate change. Detailed assessments of the impact of conservation grazing on biodiversity and climate will be made as part of ongoing monitoring work in the Forest.

Security implications

49. N/A

Charity Implications

50. Epping Forest is a registered charity (number 232990). Charity Law obliges Members to ensure that the decisions they take in relation to the Charity must be taken in the best interests of the Charity.

Epping Forest Consultative Committee

- 51. Four members of the Consultative Committee made verbal responses to an earlier iteration of this report at the Committee's October meeting. Epping Forest Heritage Trust (EFHT), Epping Forest Riders' Association (EFRA), Butterfly Conservation and The Wren Group were each enthusiastic in their support for grazing. The prospect of the new technology and flexible approach to future grazing was warmly welcomed and seen as adding "excitement" to the Forest management.
- 52. Butterfly Conservation emphasised the crucial importance of grazing to safeguarding declining grassland across the Essex and saw this report as an important part of securing conservation of scarce lepidoptera species. The Wren Group welcomed the intention to graze Leyton and Wanstead Flats but was aware of the resource constraints. The Wren Group also asked about the timing of grazing for the southern Forest grasslands and suggested that volunteer assistance would be likely for these sites. Finally, EFRA sough reassurance that, during any extension of grazing across the winter months, the perimeter gates could be left open as they would normally be at that time of year.

Conclusions

- 53. Five years on from taking the management of The Conservators' grazing herd inhouse, the projected increases in herd size and capital asset value of the herd have been exceeded compared with the trajectory set out in 2016. The range of Forest sites being grazed, includes all the enlarged heathland sites in the north to Wanstead Park in the south, matching many of the ambitions set out in the 30-year Grazing Strategy. Further sites are to be targeted by 2027 to increase the impact of grazing on the wood-pasture mosaic of habitats.
- 54. Looking ahead, there are some key aims for the grazing project to achieve, if resources allow, which include a herd of over 200 animals fully equipped with GPS virtual fencing technology and the even greater involvement of volunteers and staff in its management. Grazing is essential to the Forest's and Buffer Lands' habitat condition, to protecting grassland soil carbon and to maintaining a dynamic landscape resilient to climate change and able to promote biodiversity.

Appendices

None

Background Papers

SEF50/16 Epping Forest Grazing Expansion Plan Continuity Arrangements. NON-PUBLIC Report to the Epping Forest & Commons Committee 21st November 2016

SEF01/13 *Grazing Expansion Plan for implementing the Epping Forest Grazing Strategy.* Report to the Epping Forest & Commons Committee 13th February 2013.

Epping Forest Grazing Rationale & Strategy June 2006 (updated Nov 2008). City of London Corporation.

Dr Jeremy Dagley

Head of Conservation, Epping Forest Environment Department Telephone: 020 8532 1010

E-mail: jeremy.dagley@cityoflondon.gov.uk

John Phillips

Grazing & Landscapes Project Officer Epping Forest Environment Department Telephone: 020 8532 1010

E-mail: john.phillips@cityoflondon.gov.uk