Committee(s)	Dated
Epping Forest Consultative – For consultation	10 02 2021
Epping Forest and Commons – For decision	08 03 2021
Subject: Deer Management Strategy (SEF 07/21b)	Public
Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?	1, 5, 11, 12
Does this proposal require extra revenue and/or capital spending?	N
If so, how much?	N
What is the source of Funding?	Local Risk
Has this Funding Source been agreed with the Chamberlain's Department?	Υ
Report of: Director of Open Spaces	For Decision
Report author: Martin Newnham, Head Forest Keeper	

Summary

Following a public tender process, environmental consultants The Deer Initiative Ltd, in partnership with Dama International, Peter Green Consulting and Langbein Consulting, was awarded a contract by City of London Corporation to comprehensively review the current 1996 Deer Management Strategy for Epping Forest and it's adjoining Buffer Land.

The review recommends future management options for both the wild deer and the enclosed parkland population within the Birch Hall Park Sanctuary and proposes a framework for a 20-year management strategy that incorporates health and welfare considerations, conservation objectives, economic impacts, deer vehicle collision mitigation and public safety.

Recommendation

Members are asked to:

i. Approve option 1 of the report.

Main Report

Background

1. The Epping Forest Acts 1878 and 1880 specifically charge the City Corporation as the Conservators of Epping Forest with a series of statutory obligations including a responsibility to manage deer 'to be preserved as objects of ornament in the Forest'.

- 2. Many of the initial recommendations that were made in the 1996 deer management strategy as to the extent of the three proposed deer management areas and these objectives continue to remain valid.
- 3. The bulk of the Fallow Deer Range i.e. the area approximately bounded by the Lee Valley to the west, the conurbations of Roydon and Harlow to the North, the M11 to the east and the conurbations of Loughton and Chingford to the South. See the red boundary outlined in Map 1.



Map 1, reproduced from Langbein 2009

- 4. Within the above area, there are three zones:
 - South of the M25, Epping Forest plus, where possible, land outside of Forest ownership.
 - ii. North of the M25, The Epping Forest Buffer lands.
 - iii. North of the M25, where possible, any area within the adjacent deer range, not included in the Epping Forest "Buffer lands" ownership
- 5. Deer culling on City of London Corporation land adjacent to Epping Forest began around 1996/7 with the first formal culls recorded from 2001 to 2016 by the Cobbins Brook Deer Management Group (CBDMG). CBDMG are a group comprising of local landowners and some Epping Forest staff operating in a private capacity to an agreed management regime set by the Deer Management Strategy (1996).
- 6. In 2016, the management of deer was subject to a public tender exercise approved by your Committee and subsequently awarded to the Capreolus Club. This contract was terminated in 2017.
- 7. It was decided that further options regarding the future management of the local deer populations should be comprehensively considered externally before a new contract might be awarded. The opportunity to undertake the Deer Review was tendered.

8. In the meantime, it was agreed by your Committee that the management of deer on City Corporation land would be undertaken directly by its own staff.

The increase in wild deer and their presence in the forest

- 9. The wild deer populations of south Essex and Epping Forest are thriving with high fertility rates reflecting the absence of apex predators, apart from humans and the presence through abundant food sources particularly winter arable crops. . It is generally agreed that wild deer numbers may have doubled in England between 1999 and 2017 and this breeding success is apparent in Essex.
- 10. Deer consume approximately 3% of their body weight in dry matter daily, which may equate to more than 6kg grass or 3.5kg fresh leaves for a fallow deer every day. When deer numbers are high, such consumption can have very serious impacts upon the countryside habitat generally and particularly for plant species that deer favour.
- 11. The large numbers of deer in and around the urban areas of the south and southeast are also contributing to over half the annual toll of road traffic accidents involving deer in the UK, in which some 74,000 deer are injured or killed, and a number of humans are killed or injured each year.

Current Position

- 12. The Deer Review was commissioned with a detailed specification outlining all possible avenues of deer management to be considered. The report starts from 'no intervention' standpoint, then carefully considers alternative control options such as re-wilding, contraception and translocation through to detailed options for deer management and makes conclusions as to the suitability of each.
- 13. The review recognises that a range of respected conservation management organisations have concluded that the management of the deer population by culling is essential to both protect the environment from the effects of trampling, browsing and grazing, on protected Forest habitats and agricultural crops. Heavy browsing and-grazing can inhibit essential woodland regeneration and can destroy food and habitats essential to invertebrates, woodland birds, small mammals and other protected species. Over-population of deer will also result in deer welfare issues as food sources will become scarcer reducing overall the condition and health of the herd.
- 14. The options for the management of the deer in and around Epping Forest without culling are considered in the review but all have been discounted as being neither practical nor viable. The review highlights that there are currently limited practicable or cost-effective options to manage wild deer in the absence of natural predators other than the use of legal, lethal control methods. There is significant peer-reviewed evidence that other non-lethal methods of protection or population control including, capture

- and relocation; diversionary feeding; fencing and contraception are not only ineffective but may possibly lead to negative animal-welfare outcomes and the further detriment to habitats and public safety.
- 15. In addition to humane dispatch of road casualties and other injured deer when required, the management of wild deer within Epping Forest and its Buffer Lands has already included some level of culling since 1996. The level and distribution of deer culls undertaken since that time have helped to reduce the rate of population increase to below what it would have been otherwise. However, such culling has been restricted in its coverage to the exclusion of significant sections of the main Forest and been insufficiently consistent year-on-year to achieve relatively stable and sustainable fallow and muntjac populations and reduced levels of detrimental impacts.
- 16. While a 10-year Deer Management Plan, which is part of the 20-year management framework, has been created as part of this review, the strategy will need to be adaptive, subject to a regular audit process and be revised as circumstances dictate.
- 17. Having recognised that non-lethal approaches are not practical, the review recommends a number of courses of action; these all relate to the option to cull the deer.

Proposals

Deer Species

18. Fallow deer (*Dama dama*) are regarded as the key Epping species, because of their historic association with the establishment of the Royal Forest in the 12th Century and subsequent protection after disafforestation under the Epping Forest Act 1878. Most of the discussion and recommendations in the review relate to fallow deer which must be regarded as a permanent and desirable feature of the area. Reeves Muntjac deer (*Muntiacus reevesi*) have been increasing in number over recent years and as that trend continues their presence is becoming more significant. For example, in more heavily visited areas of the Forest, especially its southern compartments south of Chingford and Loughton, and in the oak-hornbeam wood-pasture areas their browsing has more of an impact than that of Fallow. Where practicably possible Muntjac, or any other novel or invasive, non-native deer species that become established, should be minimised in number.

Deer management

- 19. A viable minimum population of Fallow deer will need active management and the strategy gives specific objectives for this.
- 20. Those who are engaged as the deer management practitioners need to be selected carefully to ensure that they have the correct aptitude as well as adequate skills and knowledge to build and maintain public confidence when undertaking their role. The benefits of using directly supervised operatives (employed staff) to undertake this sensitive work

have been highlighted as being both more effective and likely to be acceptable to the wider public than other models. Close control of staff minimises business and reputational risk significantly and makes it easier to add value to the role through additional responsibilities of deer populations counts and monitoring and public education. Using dedicated staff to deal with deer vehicle collisions (DVCs) and other deer welfare incidents allows for a rapid and efficient response, reducing burdens on other public services and increasing the ability to record vital population data from deer involved in DVCs..

- 21. It is therefore proposed that the active deer management is undertaken by an in-house team of staff, alongside additional data collection and exclosure plot management. This approach will have an additional resource implication and will require at least two full time equivalents (FTEs) during the deer management season with occasional additional help. Deer-related issues will need to be addressed all year, requiring one duty member of staff available daily.
- 22. Deer management on the Epping Forest Charity land, Buffer Land and adjoining privately farmed estate cannot be undertaken in isolation as deer are present in high densities in the surrounding landscape. Actions taken by the Epping Forest Charity must consider the local migration of deer across its boundaries. The review recommends that where opportunities exist, the Epping Forest Charity should cooperatively engage with neighbours and consider where collaboration might benefit deer management efforts, or how future agri-environmental and woodland support mechanisms may influence the motivations of landowners to manage deer in the future.

Deer Vehicle Collisions

- 23. To maximise the welfare of deer and to minimise the economic consequences and risk to life associated with DVCs, it is recommended that:
 - Measures are adopted for dealing with injured deer at the roadside that include a formal Police/local authority endorsed scheme incorporating compulsory training and assessment for participants.
 - Ways of consistently recording DVCs to contribute to monitoring should be further developed.
 - Areas under speed restrictions should be expanded and additional permanent or seasonal signage should be considered.
- 24. The City Corporation will need to advocate to, and work with, local highway authority partners and voluntary groups to achieve these aims and continue to mitigate DVCs.

Animal Welfare

25. A review of current understanding and best practice regarding the welfare of wild deer has been produced to inform current and future management.

Birch Hall Deer Sanctuary

- 26. The careful scrutiny of European DNA evidence has demonstrated that the level of genetic uniqueness that drove the 1959 decisions to create a Sanctuary are not justified. , The review recommends that wider options to retain deer within the Birch Hall Park Deer Sanctuary are considered in terms of Park's value as an asset to inform, educate and to positively influence public opinion while addressing issues regarding the current financial liabilities. Further work is being commissioned to look a future options which will be placed before your Committee.
- 27. The sanctuary will continue to be managed according to best practice and deer welfare principles pending a more detailed review of its viability.

Monitoring and reporting

- 28. A public-facing mechanism for providing information and allowing feedback should be developed to demonstrate the Epping Forest Charity has a clear and consistent evidence-based approach and to encourage acceptance of the need for the control of the deer population. This will be achieved through accurate and effective monitoring, the collation of data and transparent public reporting to meet the requirements outlined in the review.
- 29. Progress towards objectives must be monitored, recorded, reported, and reviewed at least annually in an effective and consistent way using as many data sources as is realistic e.g. impact/activity assessment, habitat assessment, exclosure plots, crop impacts, cull and count records, DVC records and anecdotal/incident records.

Options

Option one

30. To adopt the recommendations of the report for implementation including the management by Epping Forest Charity staff of all deer. This will allow for close control of deer management by the Epping Forest Charity, ensuring that management is well evidenced and undertaken professionally, sensitively and humanely. There is a direct cost to the Epping Forest charity to deliver this option, but the work is considered core to the aims of the charity. **This option is recommended**.

Option two

31. To adopt the recommendations of the report for implementation but deliver these through external means by contractors and volunteers. This may present potential savings on cost but will take longer to implement and runs the risk that management and monitoring is not so closely controlled. **This option is not recommended.**

Option three

32. Not adopt any of the recommendations of the report. Deer numbers would continue to grow in the absence of any natural predator resulting in a negative impact on the biodiversity of the

Forest, loss of crops and potential animal welfare issues. **This option is not recommended.**

Key Data

- 33. Based on current data it is estimated that in the region of 600-800 wild deer roam in the deer management areas of Epping Forest, Buffer Lands and surrounding farm and woodland.
- 34. It is proposed that this number is reduced to a scientifically determined stocking density of 6-8 individual deer per square kilometre. This stocking density will substantially reduce impacts on internationally protected Forest habitats and agricultural crops, while reducing the incidence of DVCs. Annual survey works based on transect counts; thermal imagery counts; aerial photography and winter vegetation impact monitoring will help create a sustainable wild herd numbering 150 individuals over a realistic time period.
- 35. As part of a ten-year plan, based on annual deer population counts, the current high and damaging population levels would be reduced progressively to a sustainable level. The Deer Management Strategy and report recommend an optimum number of deer per hectare per 100 hectares within ten years for a healthy wild deer population. We will monitor and assess the impact of the reduction in numbers balanced against environmental impacts, using census work and grazing impact assessments to set each seasons population reduction. This will be done annually.

Corporate & Strategic Implications

Strategic implications

36. This report supports the Open Spaces Business Plan objectives:

- Our open spaces, heritage and cultural assets are protected, conserved and enhanced
- Our habitats are flourishing, biodiverse and resilient to change
- Nature, heritage and place are valued and understood

Financial implications

37. The additional resources to manage the delivery of the plan including staff costs will be met from local risk. Additional funding for highways signage and other mitigations for deer vehicle collisions will be sought from partner organisations including ECC highways.

Resource implications

- 38. The delivery of the deer management strategy will require 2 FTE staff during the culling season as well as a duty team member throughout the year.
- 39. The staffing commitment will be met from the existing Forest Keeper team, but other duties will be reduced accordingly during the culling

season. It is hoped that the increased cost of population monitoring can be met through 'citizen science' voluntary monitoring.

Legal implications

40. The management of both wild and captive deer will be delivered through statute law and legislation for firearms and deer management.

Charity Implications

41. 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.

Risk implications

42. Reputational risk: Human-deer encounters are often valuable experiences and the public often feel a degree of "ownership" of wild deer. The large-scale population management of wild deer is set out in the 10-year framework which works to rigid professional standards with a strong commitment to publicly accessible deer population data. Management plans and publicity materials should make clear how the management of deer is integrated into wider objectives such as long-term habitat sustainability or protection of woodland birds and invertebrates.

Equalities implications

43. This report has no relevance to equality.

Climate implications

44. The delivery of the Deer Management Strategy will improve conditions and reduce environmental impacts on habitats within the Special Area of Conservation (SAC) and Site of Special scientific Interest (SSSI).

Security implications

45. None

Epping Forest Consultative Committee Comments

46. The Consultative Committee raised the following:

- Epping Forest Forum have offered to fundraise for signage to help mitigate against the risk of DVCs.
- The feasibility of Body Worn Video will be explored for the forthcoming deer management season.
- The London Wildlife Trust complimented the approach set out in the Review and offered their support to run concurrent messaging, which was welcomed. The Head Keeper and Head of Visitor Services will work with LWT to run supportive messaging.
- A summary document for the public will be produced to make the public aware of the current position and challenges. (See Appendix 1).
- Discussions took place regarding the Birch Hall Park deer sanctuary and it was recognised a further detailed report was required and will be a separate committee paper for consideration by the Epping Forest and Commons Committee.

Conclusion

- 47. The acceptance of the recommendations and the measures outlined in the review will set the conditions for the sustainable management of deer at a landscape level for the next twenty years.
- 48. The successful delivery of the deer management strategy will also improve the future condition of the SSSI and SAC by reducing trampling and browsing pressure on woodland regeneration and woodland flora, restoring the vigour of woodland ecosystems encouraging the presence of broader invertebrate, songbird and small mammal populations that are currently negatively impacted by current deer population levels.
- 49. Delivering the framework through staff resources improves the coordination of monitoring research, maximises control and minimises the reputational risk. The recommendations in the report will ensure the safe, sustainable and effective management of deer, offering the best animal welfare processes as well as the safety of the public.

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