Initial review of current visitor data for Epping Forest

Durwyn Liley, 26th September 2016

1.1   This brief document considers the current visitor data for Epping Forest and it's potential to inform decisions relating to planning policy and impacts of development in the surrounding area.

Overview of visitor surveys to date

1.2   Over the period 2010 to 2014 an impressive volume of visitor survey work was undertaken at Epping Forest, involving staff and volunteers with specialist consultancy support. The results are set out in a series of annual reports. The work was undertaken as part of the Branching Out project and funded through Heritage Lottery Funding. The survey work was undertaken to:

- Calculate the annual number of visits to Epping Forest
- Understand visitor behaviour (duration of visits, activities undertaken etc.)
- Provide a benchmark by which the success of interventions/improvements can be checked

1.3   Surveys were conducted in each year and involved observation surveys and questionnaires. The **observation surveys** involved surveyors walking set routes and mapping/recording all people seen. Routes were repeated eight times to cover different times of day, school holidays and non-holiday periods and both weekends and weekdays. Over the five years all the main areas of the Forest were surveyed and some areas repeated in different years.

1.4   From the survey results, combined with an understanding of the events etc. a total of 4,271,398 annual visits was estimated to the Forest each year, with visitor use concentrated in the southern part (427ha of the total area of 2476ha), which receives more than half of all visits per ha. The honey pot sites across the Forest (Wanstead Flats, Bush Wood, Wanstead Park, Hollow Ponds, Connaught Water and High Beach) receive 52% of all visits to the Forest.

1.5   In addition **a questionnaire survey** was undertaken in each year. Questionnaires were hosted online, with the link circulated to those already on the City of London consultee email list, and were provided to visitors at the three Visitor Centres to complete the survey online or in hard copy with help from staff and volunteers. In addition staff and volunteers targeted visitors from the harder to reach groups such as under 16s, ethnic minorities, the elderly and disabled, at the busier locations with the hard copy version to be completed by themselves or with help from staff and volunteers.

1.6   In 2014 alone an impressive 885 Questionnaire Surveys were completed. Questionnaire data included home postcodes of visitors.

Applicability and relevance for considering impacts of development

1.7 The volume of visitor data provides a great estimate of overall visitor numbers and the spatial distribution of visitors within Epping Forest. A large volume of postcode data has been collected over the period 2010-2014 and it should be possible to achieve a robust analysis with that data. Further consideration is required as to what extent the postcodes are likely to be random – for example those people on the consultation mailing list are likely to be very local residents with a strong connection to the forest and may not necessarily accurately reflect the spatial distribution of visitors.

1.8 Postcode data from 2014 – involving 507 fully geocoded home postcodes - are shown in Map 1. This is all data pooled and I do not know what proportion came from which survey location. I have summarised the number of postcodes within concentric rings (each 1km wide) around the SAC boundary – i.e. buffers drawn at 1km, 2km 3km etc. These data are summarised in Table 1. The table also gives the number of residential properties within the buffer in 2016. By expressing the number of interviewee postcodes per band in relation to the number of residential properties (i.e. interviews/properties) it is possible to gain an indication of how visit rate declines with distance from the SAC. These very crude and initial results would suggest 76% of visitors come from within 4km, that 11% of visitors come from beyond 5km and that visit rates to Epping Forest appear to level off and reach a low level somewhere around 5km.

1.9 Caution is required in relying on these (for example in any Habitats Regulations Assessment) because:

- It is not clear to what extent the postcodes reflect an accurate random sample of visitors
- The data are summarised by distance band from the SAC boundary, at other European sites/areas data has been typically presented as the distance between the interview location and home postcode. Such an approach is likely to give different results.
- There is no consideration of the types of activity that may impact on the SAC. For example if dog walkers are the group of particular concern, the data should be filtered to look at dog walkers only.

1.10 As such more detailed analysis is required of postcode data and there may be a need for additional visitor survey work specifically targeted at achieving a random sample of visitors and determining where they live and why they visit.

Table 1: Summary of residential properties per 1km band around the SAC and the number of interviewee postcodes (from 2014) within each band. A total of 507 complete postcodes were gathered in the 2014 survey.

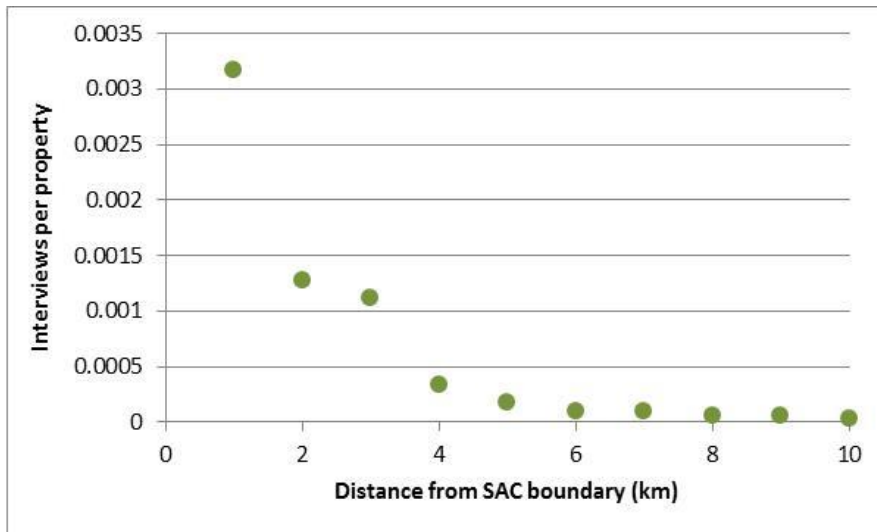|	residential properties 2016	interview postcodes	% interviewees (cumulative %)	interviews per property
1	64819	205	40	0.003163
2	60641	77	56	0.00127
3	69202	77	71	0.001113
4	72761	24	76	0.00033
5	111198	19	79	0.000171
6	119700	12	82	0.0001
7	133194	13	84	9.76E-05
8	139411	8	86	5.74E-05
9	148547	9	88	6.06E-05
10	144305	5	89	3.46E-05
beyond 10km		58	100	

Figure 1: Number of interviews (that generated a complete postcode) in 2014 per residential property, in relation to distance. Graph plots data from Table 1. Plot based on 1km distance bands around the SAC (see Map 1).

Map 1: Visitor postcodes

Visitor survey postcodes

Epping Forest SAC

1km buffers (out to 10km) from SAC

Contains Ordnance Survey Data. © Crown copyright and database right 2015.