

Water Vole and Otter Survey
Of
Land at Water Lane,
Angmering,
West Sussex

On Behalf of:
Barratt Homes Southern Counties

August 2020

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		SR	AC	JBA	August 2020
Job Number: JBA 19/283		 JAMES BLAKE A S S O C I A T E S Title: Water Vole and Otter Survey of Land at Water Lane, Angmering, West Sussex			

Disclaimer

James Blake Associates Ltd have made every effort to meet the client's brief. However, no survey ensures complete and absolute assessment of the changeable natural environment. The findings in this report were based on evidence from thorough survey: It is important to remember that evidence can be limited, hard to detect or concealed by site use and disturbance. When it is stated that no evidence was found or was evident at that point in time, it does not mean that species are not present or could not be present at a later date: The survey was required because habitats are suitable for a given protected species, and such species could colonise areas following completion of the survey.

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EXECUTIVE SUMMARY

Water vole and otter surveys were carried out at land at Water Lane, Angmering in West Sussex on the 15th May and 7th August 2020, to assess the presence or likely absence of the species on site.

No water vole or otter were recorded using the site, or habitats within 50m of the site boundary, during the survey period. Therefore, no mitigation or constraints to the development apply to the site with respect to water vole and otter. However, enhancement suggestions are included in the report.

The survey was based on the methods described within the 'Water Vole Conservation Handbook, 3rd Edition' (Strachan, Moorhouse and Gelling 2016) and Riversearch 2011-13 (incorporating the Essex Otter Survey) (Darren Tansley 2011).

1 INTRODUCTION

Background to the study

- 1.1 James Blake Associates Ltd. was commissioned by Barratt Homes Southern Counties to undertake a water vole (*Arvicola amphibius*) and otter (*Lutra lutra*) survey of the stream on the site and any waterbodies within 50m of the site boundary.
- 1.2 Evidence of water vole was recorded within 50m of the site boundary in 2016 (The Ecology Partnership, 2017), however no evidence was recorded on the site itself.
- 1.3 Water voles are included in the Local Biodiversity Action Plan (LBAP) for West Sussex, the Natural Environment and Rural Communities (NERC) Act 2006 and are fully protected under the Wild Mammals (Protection) Act 1996 and the Wildlife and Countryside Act 1981. Species of Principal Importance (SPI) in England, listed under Section 41 of the NERC Act, are a material consideration for planning decisions.
- 1.4 Otters are also included in the LBAP and are listed as an SPI in England, listed under Section 41 of the NERC Act 2006. Otters are fully protected under the Wild Mammals (Protection) Act 1996 and are fully protected under the Wildlife and Countryside Act 1981, listed on Schedule 5, (as amended) and are a European Protected Species under the Conservation of Habitats and Species Regulations 2018, as amended.
- 1.5 The Wildlife and Countryside Act (1981) makes it an offence to:
 - intentionally kill, injure or take otters and water vole;
 - intentionally or recklessly disturb otters and water vole;
 - intentionally or recklessly damage, destroy or obstruct access to otter holts or any place used by the animal for shelter or protection; and
 - intentionally or recklessly damage, destroy or obstruct access to any place or structure which water vole use for shelter or protection.

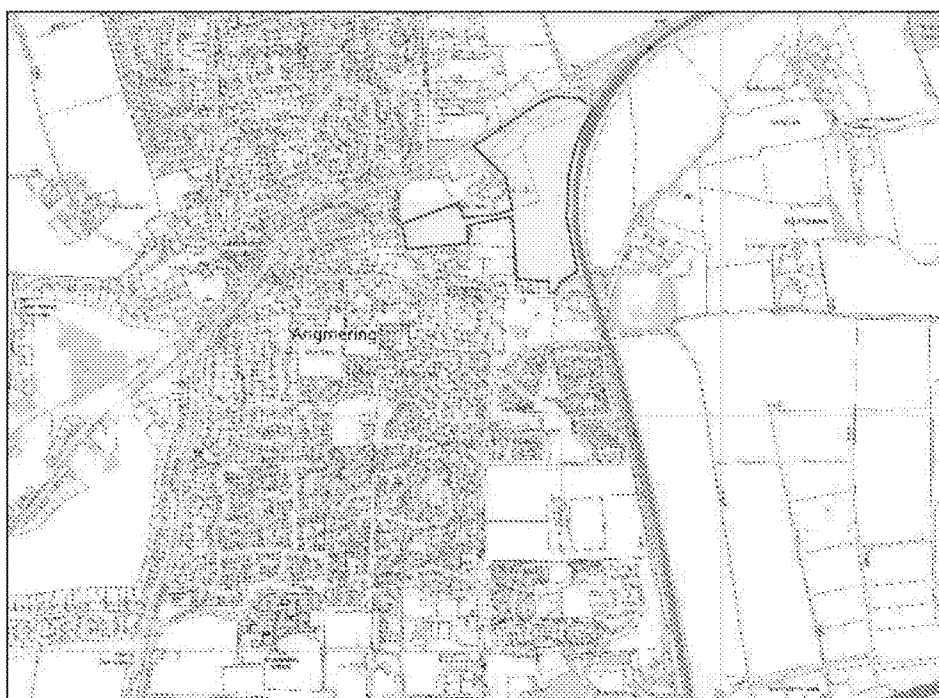
Surveyors

- 1.6 Surveys were carried out by Laura Cobden BSc (Hons) MCIEEM, Sam Rigg BSc (Hons) ACIEEM and Dan Blake BSc (Hons) Qualifying CIEEM.

Site Description

- 1.7 The site is approximately 9.3 hectares in size and is located to the south of Water Lane in the town of Angmering, West Sussex. The wider landscape includes the town of Angmering, residential and arable land. The A280 runs east of the site (see Figure 1 below).
- 1.8 The majority of the site comprises grazed improved grassland which is sub-optimal for water vole and otter, however, a stream is located to the north of the site associated with areas of scattered scrub and marshy grassland. A drainage pond linked to the on-site stream (via a culvert) is located approximately 40m north east of the stream and a fishing pond is also located 30m to the west of the stream. No other water bodies are found within 50m of the site boundary.

Figure 1: Site location



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Aims and objectives

- 1.9 The aim of the survey was to:
- determine if significant water vole and/or otter populations were using the site at the time of the survey;

- determine the likely risk of impact to water vole and otter and their local conservation status from the proposed development; and
- recommend precautionary measures, mitigation to prevent harm to water vole and otter, or compensatory habitat creation if necessary.

2 METHODOLOGY

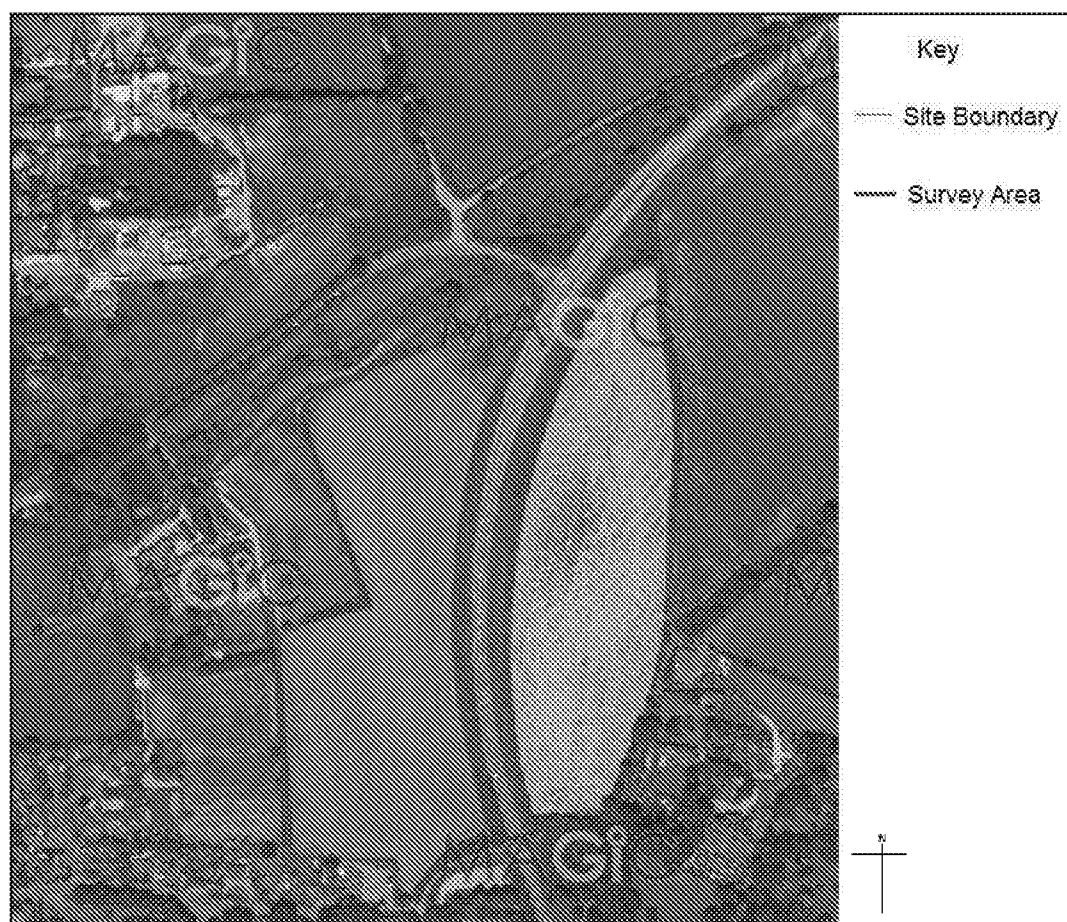
- 2.1 The survey methodology followed best practice as recommended by the 3rd Edition' (Strachan, Moorhouse and Gelling, 2016) Water Vole Conservation Handbook and Riversearch 2011-13 (incorporating the Essex Otter Survey) (Darren Tansley, 2011).
- 2.2 The surveys were undertaken within the optimal survey period (April to September) following accepted guidelines (Strachan, Moorhouse and Gelling, 2016).
- 2.3 In order to effectively determine the presence of water voles in the survey area, a minimum of three different fresh, water vole field signs (such as burrows, droppings, feeding remains, latrines, footprints or sightings of individuals) must be found. A single field sign could potentially be confused with signs left by other mammal species associated with bank side habitats such as brown rat (*Rattus norvegicus*) or bank voles (*Clethrionomys glareolus*). In addition, burrows indicative of water voles may actually be colonised by rats or other vole species. However, if water vole droppings or latrines are found these confirm the presence of water voles immediately, as they are distinct from those of other potentially present species.
- 2.4 To determine whether otter were present or likely absent, the site was surveyed for spraints (droppings). Commonly used features such as bridges/culverts and the bases of trees associated with the water bodies were targeted, and footprints and other field signs such as slides were noted.

3 RESULTS

- 3.1 Vegetation in the stream, along the banks and adjacent habitats to the stream on site that were surveyed included; white clover (*Trifolium repens*), sow thistle (*Sonchus arvensis*), selfheal (*Prunella vulgaris*), teasel (*Dipsacus fullonum*), ragwort (*Senecio sp.*), red fescue (*Festuca rubra*), red dead-nettle (*Lamium purpureum*), white dead-nettle (*Lamium album*), cleavers (*Galium aparine*), cocksfoot (*Dactylis glomerata*), mugwort (*Artemisia vulgaris*), common nettle (*Urtica dioica*) and rosebay willow herb (*Chamaenerion angustifolium*). The preferred food plants of water vole such as rushes (*Juncus sp.*) and sedges (*Carex sp.*) were also present in some areas. Water mint (*Mentha aquatica*) and water forget-me-not (*Myosotis scorpioides*) were recorded in dense mats over the stream and adjacent to the northern side of the stream.
- 3.2 Areas of dense and scattered scrub are present on the southern side of the stream with some mature and semi-mature trees. Species in this area included; willow (*Salix sp.*), common nettle, elder (*Sambucus nigra*), bramble (*Rubus fruticosus*) and blackthorn (*Prunus spinosa*). Some dead trees had fallen across parts of the stream.
- 3.3 Evidence of rabbit activity was recorded on the southern bank of the stream, however, holes looked disused with the majority collapsed and/or debris covering the entrances. No recently used mammal pathways were evidence and no pathways were noted to enter the stream; all considered to be going up the banks, to the south.
- 3.4 The drainage pond on the opposite site of Water Lane and connected to the on-site stream, via a culvert at the north eastern point, was found to be dry for the entirety of 2020. The area is predominantly overgrown with rushes and dense scrub, dominated by bramble.
- 3.5 The active fishing pond approximately 30m west of the stream, across a private driveway, was found to be used by various waterfowl such as swans, geese and ducks (both wild and domestic). No vegetation was present in the pond during either survey visits and adjacent habitats were managed by regular mowing. The pond sides were also steep and wooden boarded.

- 3.6 The active fishing pond to the west is considered unsuitable for water vole due to the regular disturbance and no suitable banks for burrow creation. No evidence of otter was recorded during either survey visits.
- 3.7 No evidence of water vole or otter was recorded at the on-site stream or within 50m of the site boundary and no burrows (old or new) were observed.
- 3.8 See Figure 2 for the survey area.

Figure 2: Map of survey area



4 EVALUATION AND CONCLUSION

- 4.1 The survey was carried out within the optimal time of year for water vole and otter surveys, consequently, the survey results are considered to provide an accurate account of the water vole and otter status on the site.
- 4.2 No evidence of otter and water vole was recorded during either survey visit. It is therefore considered unlikely that water vole and otter would be present

in the stream within the site boundary. It is also considered unlikely that water vole and otter are present within the active fishing pond to the west and the dry drainage pond to the north east.

- 4.3 No constraints to the proposed development exist with regards to water vole and otter. However, recommendations for enhancing the site for wildlife are detailed below.
- 4.4 All works within the vicinity of the watercourse should be carried out in line with current pollution prevention guidance.
- 4.5 Retention and enhancement of the stream on site is recommended; the wetland habitats could be incorporated into areas of public open space. Enhancements to the stream could include; planting of more suitable aquatic species to provide food plants for species such as water vole. Aquatic plant species could include, water mint (*Mentha aquatica*), water forget-me-not (*Myosotis scorpioides*), purple loosestrife (*Lythrum salicaria*), marsh marigold (*Caltha palustris*), meadowsweet (*Fillipendula ulmaria*), rushes (*Juncus sp.*) and sedges (*Carex sp.*).
- 4.6 Strimming of overgrown scrub vegetation on the banks could be undertaken to prevent heavy shading and allow growth of aquatic plants. As well as planting of a tussocky grassland on the top of the banks, particularly the southern bank.
- 4.7 If development does not begin within 12 months of this report, then the surveys should be updated to ensure that otter and water vole have not colonised the site in the interim.

5 REFERENCES

Darren Tansley (2014). Riversearch 2011-2013 (Incorporating the Essex Otter Survey).

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