# Arundel By-Pass — Preliminary Bat Radio-tracking results

14/12/2017





### Summary

Bat ecology

Survey findings

DCO/legislative compliance

Risks to each option

Licencing solutions and further work

Mitigation design and delivery – Green bridges, roost provision, lighting, culverts

Risks to the programme

Questions



### Bat ecology

There are 17 species of bat that live and breed in the UK

Bats are nocturnal and roost during the daytime

All UK bats hibernate during the winter

Bats give birth in summer, usually to a single pup

Bats can use a variety of natural and built structures for roosting throughout the year including trees, buildings, bridges and underground sites such as caves and tunnels

All UK bats feed on insects, which they catch using echolocation

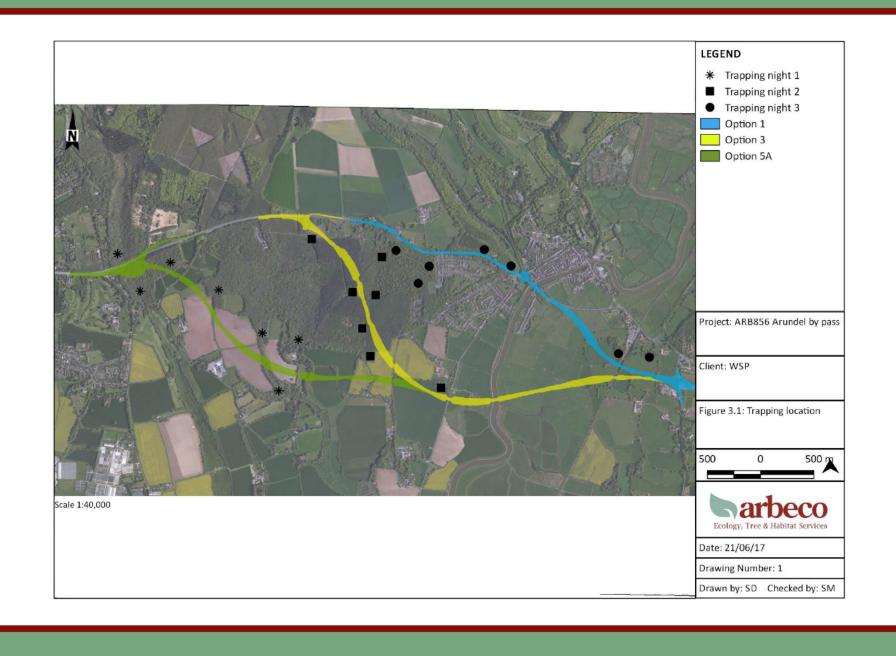


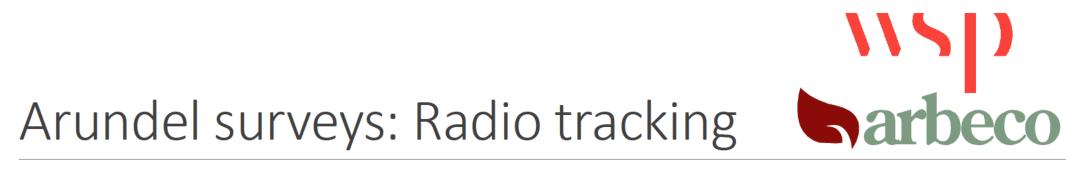
## Bat surveys undertaken in 2017

- 1. Roost Assessment Surveys
- 2. Activity transects
- 3. Crossing point surveys
- 4. Static surveys
- 5. Transects landscape effects
- 6. Trapping
- 7. Radio-tracking

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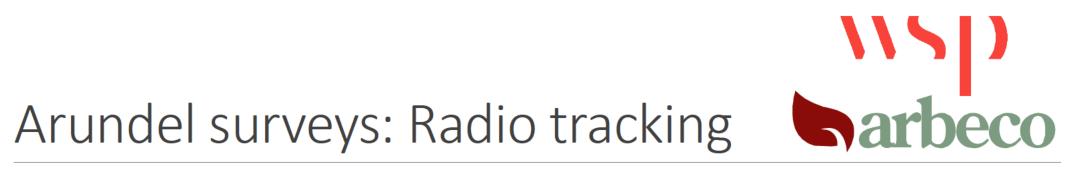




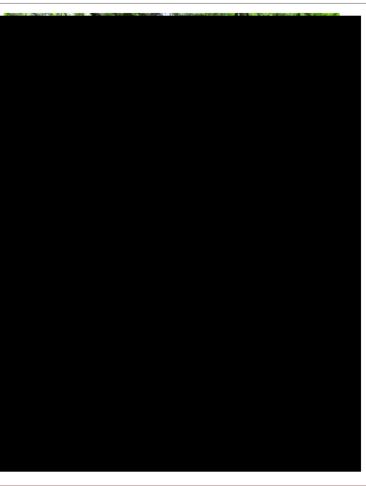
Autobat sound emitter



Harp trap













#### Results - Woodland Bat species - Natterers





### Results - Woodland Bat species

#### Daubenton's







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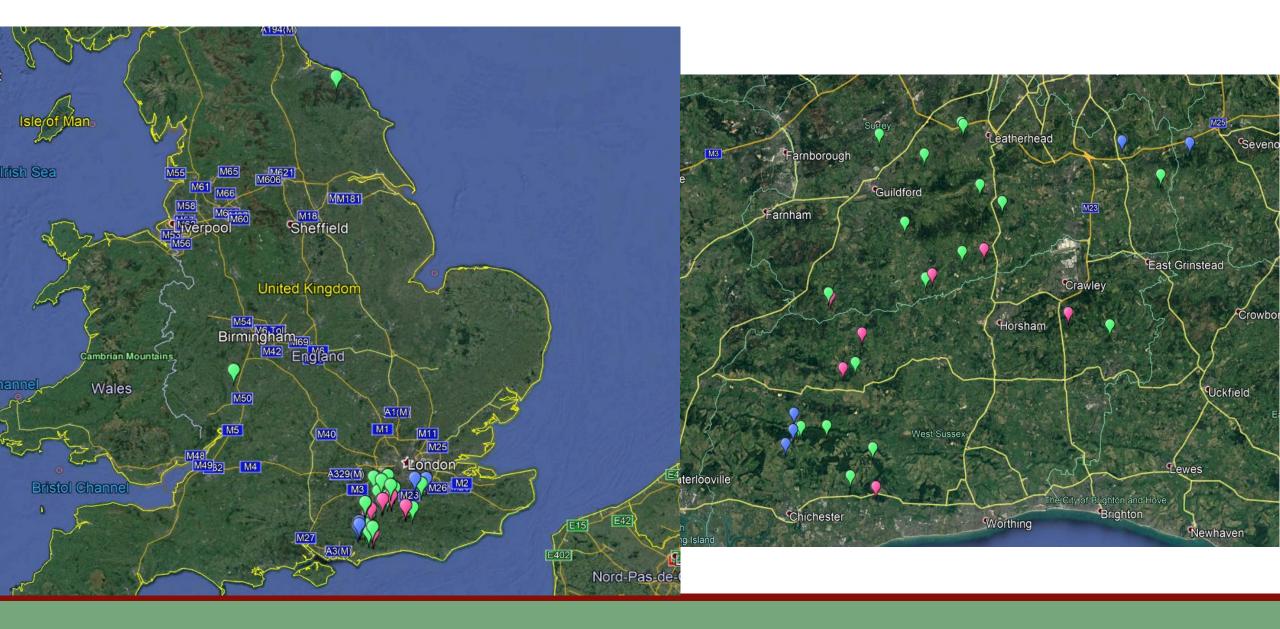




Alcathoe



### Alcathoe UK Distribution





Annex II

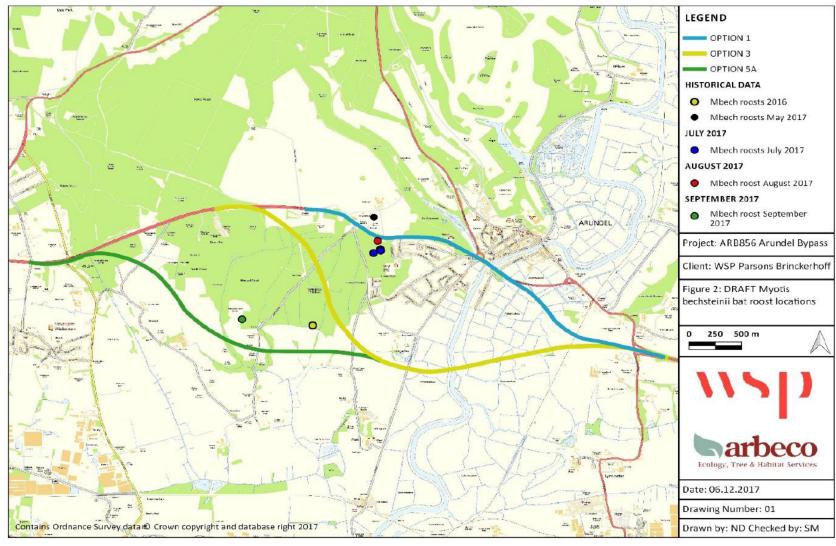




#### Results - Woodland Bat species — Barbastelle

Annex II





Bechstein's

