

The OPAL Bugs Count Survey

Help us investigate how the built environment affects invertebrates



Invertebrates have been termed 'the little things that run the world'. They are a vital part of all ecosystems, and perform a huge range of essential functions, such as pollination or breaking down organic matter.

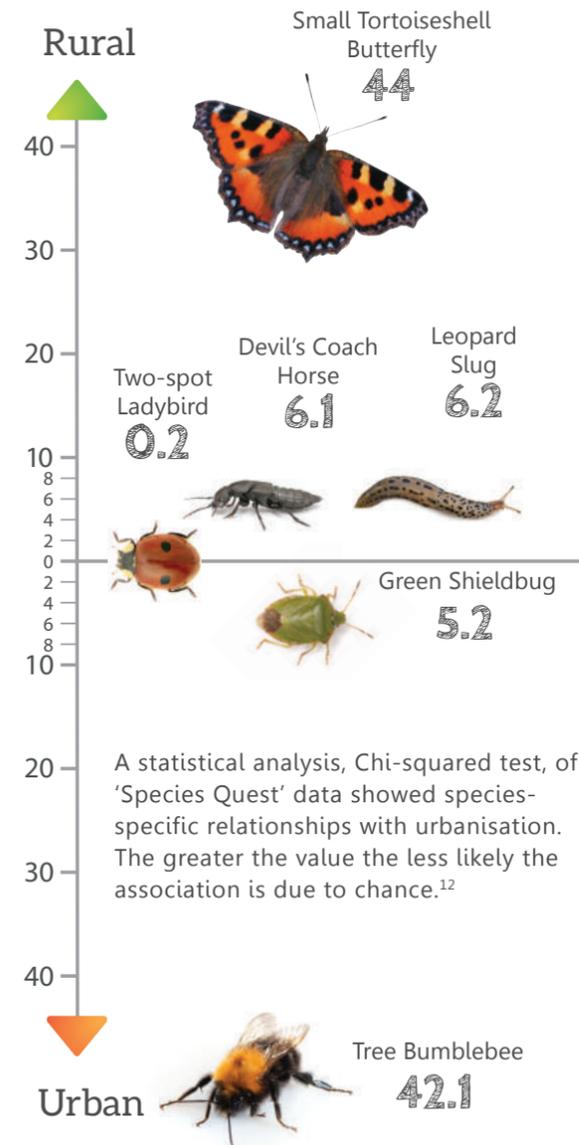
An incredible 96% of all known animals are invertebrates. Without them the world would be a very different place. They really do count.

The objective of the OPAL Bugs Count Survey was to investigate the effect of urbanisation and habitat characteristics on the abundance of 16 broad invertebrate groupings, such as snails, earthworms, butterflies and moths, and centipedes. The survey also sought to investigate six particular invertebrates, each of which were selected in order to investigate a particular question (e.g. How far north and west has the Tree Bumblebee spread since arriving in the UK?) and because they are relatively easy to identify to species level.

The survey was divided into four activities:

- 1 Hunting for ground-living invertebrates on soft ground surfaces like soil, short grass and among fallen leaves and twigs
- 2 Searching for invertebrates on human-made hard surfaces like paving, fences and the outside of buildings
- 3 Looking for invertebrates on plants, including long grass, flowers, shrubs and trees
- 4 Looking out for the six Species Quest bugs throughout the three activities listed above

Survey results



A statistical analysis, Chi-squared test, of 'Species Quest' data showed species-specific relationships with urbanisation. The greater the value the less likely the association is due to chance.¹²

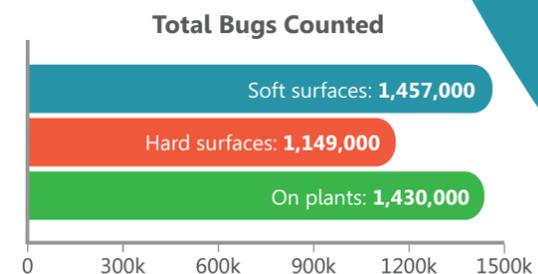
Bugs Count Survey Facts:

4 million

Over 4 million bugs have been counted.

12,000

Over 12,000 Bugs Count Surveys submitted.



In Focus Low Barriers to Participation

The Bugs Count Survey has had thousands of participants, in part because of its low barriers to participation. It was designed to produce scientifically useful results and be easy to do, requiring no previous identification experience. Consequently, almost anyone of any age and experience can participate. This approach offers three important advantages over surveying by professionals. Firstly, data can be gathered over larger scales of space and time, including from areas otherwise difficult to study, such as private property. Secondly, members of the public can gain a better understanding of their local environment and their relationship to it. Thirdly participants will better understand how the process of scientific investigation is carried out, equipping participants with new skills and empowering them with a role within the scientific process.

Low barrier to entry citizen science surveys are perhaps best suited to scoping broad trends that can then be explored in more detail by professional scientists or non-professionals with more experience.¹²

