

## Citizen Science

By Prof Adam Hart at the RAU on 10<sup>th</sup> December 2014

Professor Hart provided the Cirencester Science and Technology Society with a fascinating and lively lecture on the changes to scientific data collection that are taking place through the rapid development of what is currently termed “Citizen Science”.

In a well illustrated lecture Adam Hart initially considered the meanings of the words Citizen and science. In the context of the lecture he considered the term citizen to be someone who is not professionally involved in the specific tasks of data gathering and the term science to reflect the more broadly based approach of scientific method employing accurate and objective observation.

Although, in a sense, citizen science can be considered to have been in existence for many decades the rapid development of the internet and mobile technology over the past couple of decades has revolutionised the scope and uptake of this particular form of scientific involvement by the wider public.

A number of interesting examples of the application of this type of public participation in data recording were provided by the lecturer whose special interest in the field of entomology was widely represented.

The British Trust for Ornithology has enlisted the enthusiasm and interest of a number of keen amateur ornithologists in the collection of information about bird nesting habits for no less than 75 years in one of the longest running participatory science projects in the UK. In this project more than 600 volunteers monitored over 30,000 bird nests each year. Since 1940 some 1.35 million nest records covering 232 species have been made.

Similarly the Bees, Wasps and Ants Recording Society (BWARS) takes advantage of modern digital technology that enables a large number of non-professionals to record the location, breeding habits and many other aspects of the lifestyles of these insects in the British Isles. More specifically, Professor Hart recalled the contribution of a large number of volunteers in the well publicised “flying ant project” instigated by the Society of Biology in 2012 and followed up in subsequent years. The initial results from data supplied by participants showed that, indeed, there are significant peaks in flying ant activity on certain days, usually at the end of July and early August.

Other examples of Citizen Science involvement cited by Adam Hart included surveys of UK Ladybirds, butterfly conservation and observations relating to ash dieback. He left the audience in no doubt that this is a fast expanding area of scientific study.

**References:** Flying ant survey: <https://www.societyofbiology.org/news/14-news/909-flying-ant-survey-2014-launched>