Lark Observatory: position paper

Libby Ranzetta and Andrew HInchley, November 2021

Executive summary

A project to manage and develop scientific research on the Lark and its tributaries is proposed. The Lark Observatory will bring together professional expertise, citizen scientists and river data under one (virtual) roof. It will provide the academic oversight and management structure to guide the work and support the volunteers involved.

The Lark Observatory will be convened by the RLCP and run collaboratively by a partnership board drawn from local interested parties. The plan at this stage is to seek grant funding and sponsorship for equipment, professional supervision, training and technical support for volunteers, and set up costs and overheads.

The draft aims of the Lark Observatory are:

- To provide high quality data and analysis to inform action to improve the health of our rivers
- To involve a wide range of local people in learning about and helping to conserve the Lark, its tributaries and habitats

Background and wider context

Citizen science is an increasingly popular approach to undertaking monitoring and scientific research. Citizen science is defined as the involvement of volunteers (i.e. people who are not involved as part of their employment) in science, so it has the dual benefits of making a contribution to 'real' science, while also engaging many people with science¹.

The involvement of the community in helping to address a local, complex problem arising from human behaviour has a number of advantages, such as excellent engagement for people wanting to make a valuable contribution; cost-effective data collection; diversity of experience and expertise in the project; engendering grass-roots support for change (in the behaviours that damage the river).

Various citizen science projects are already underway in the catchment, eg Morph, Preventing Plastic Pollution, BFER ponds and streams, Riverfly monitoring. The RLCP Pollution Group has identified a need for additional projects to measure pollution arising principally from agricultural run-off and sewage. At present we do not have sufficient resources or expertise to coordinate these projects and the analysis of their data. Bringing the projects together under the auspices of the Lark Observatory will make the data more accessible, and the work more efficient.

¹ Pocock, M.J.O., Chapman, D.S., Sheppard, L.J. & Roy, H.E. (2014). *Choosing and Using Citizen Science: a guide to when and how to use citizen science to monitor biodiversity and the environment.* Centre for Ecology & Hydrology. https://www.ceh.ac.uk/citizen-science-best-practice-guide

Meanwhile, CamEO will be a demonstrator catchment for the new CaST Co (Catchment Systems Thinking Cooperative) project - a national project funded through Ofwat of £7.1 million over three years. The aim is to drive a transformation in how local catchment data and evidence is collected through a national monitoring framework, with an open data strategy, engaged customers, demonstrated benefits and sustainable funding. Across CamEO, dedicated time, resource, and support will be committed to build up existing and create additional citizen science programmes, connecting with initiatives in neighbouring Broadland catchment. This will aim to bolster the capability of citizen science programmes to collect and use meaningful data and evidence, defining and embedding standards for citizen science. This will be considered at local, regional and national scales between local partnerships and multiple organisations such Anglian Water, the Environment Agency, the Rivers Trust, and others. The Lark Observatory will be perfectly placed to take advantage of the resources and expertise available through the CaST Co demonstrator project.

Next steps

A small steering group of Libby Ranzetta, Andrew Hinchley and Steph Holland will develop more detailed plans for governance and funding arrangements for the Observatory, for consideration by RLCP.