

## Early detection of health and welfare issues via egg producers' records

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### Executive Summary

Small- and medium-sized enterprise (SME) egg producers gather extensive data on their flocks but do not have time or capacity to analyse it to look for trends/patterns that might alert them to production, health or welfare problems.

- Most producers surveyed keep egg production records on paper, or a mixture of paper and on a database.
- For those producers that use a database (either transfer of paper records to database, or directly onto database), most use their own spreadsheets, which means that design, layout, and methods vary between producers.
- Meanwhile, there have been many developments in 'smart farming' technology. As a result, there are now several systems that producers can install in their poultry sheds to automatically track changes in poultry production, health and welfare.

### Objectives

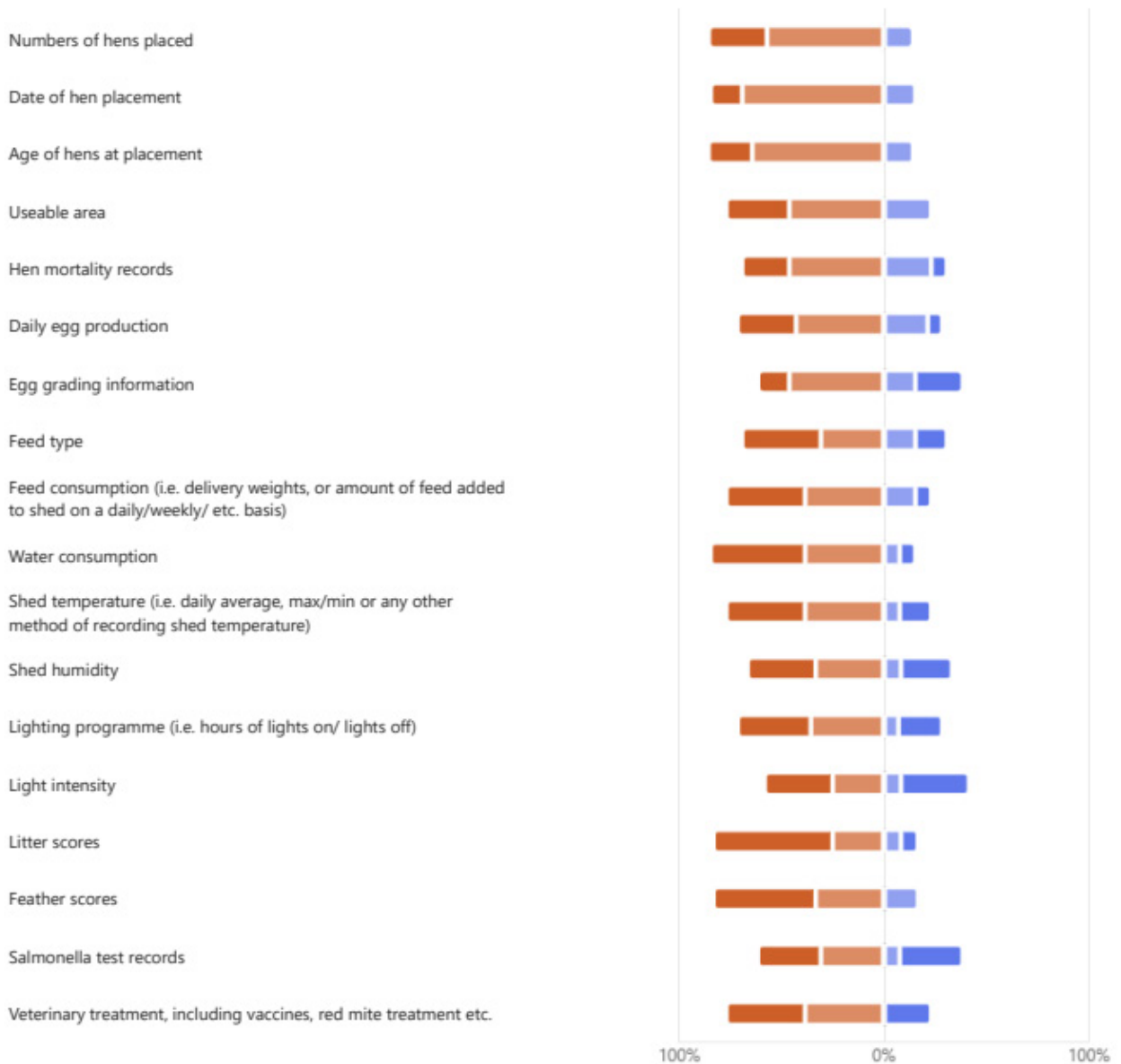
- By surveying SME egg producers, to understand what egg production and associated data is collected and how.
- To understand if (in theory) simple modelling techniques (set up by EPIC colleagues) could help SME producers gain greater insights from their data about hen health, production and welfare.

### Major Findings

Most producers keep records on either paper only, or on a mixture of paper and a database. Where producers use a database, they use their own designed spreadsheets, meaning that the layout, type of data, units of measurement etc will differ from person to person. This would make modelling difficult, as data need to be presented in a standardised format to be used within the same model. As a result, the next phase of work (proposed for Year 5) will not progress.



- Collected and kept on paper only
- Collected and kept on a mix of paper and a database
- Collected onto paper first then transferred to a database
- Collected directly onto a database



**Figure:** Producers' responses to: "In what format do you collect and keep the following information? 'Paper' means written records; 'database' means entered into your phone or tablet or computer onto a spreadsheet or a remotely-managed data collection system."

### Important Assumptions and Limitations

The numbers of responses to the survey were very low (n=14), thus it may not be representative of how egg producers in Scotland or the UK keep records of egg production and associated hen health and welfare.

### Timeline and Outputs

- A more detailed report on this work is complete.
- An article will be offered to Poultry World for publication by 31 March 2026.

### Links to Existing Publications and Reports

For the full report, see here