

## First Usutu virus detection in a wild bird outside Greater London in the United Kingdom

[max 400 words]

Usutu virus (USUV) is an emerging zoonotic pathogen (Cle et al., 2019) that was detected in wild birds in the United Kingdom (UK) for the first time in 2020 (Folly et al., 2020). Redetections in the same location (Greater London) in subsequent years, supported by whole genome sequencing, suggest that the virus is overwintering in the UK (Folly et al., 2022). Like West Nile virus (WNV), USUV belongs to the *Flaviviridae* family and is transmitted in an enzootic cycle between mosquitoes and birds, with occasional spill-over into other animals, including humans. However, the risk to public health from USUV is considered low (HAIRS, 2020).

In July 2023, the deaths of two juvenile blackbirds (*Turdus merula*) were reported. One was found in Greater London at the site of the original USUV outbreak, the second in rural Cambridgeshire. Post-mortem examinations revealed non-specific findings including splenomegaly and pulmonary congestion, similar to previous USUV infections in this species (Giglia et al., 2021). Brain and kidney samples from both birds were submitted to the Animal and Plant Health Agency. USUV was detected by USUV-specific qPCR (Jöst et al., 2011) and confirmed by genome sequencing for both birds.

Since its first detection in southern Europe in 1996, USUV has spread widely, with thousands of Eurasian blackbirds (*Turdus merula*) and some other species having succumbed to infections (Vilibic-Cavlek et al., 2020). Increasing periods of hot weather during the summer months and milder winters could promote spread of the virus (Ciota & Keyel, 2019). While a reduction in blackbird reporting rates combined with a cluster of disease incident reports of blackbirds in southern England pointed to regional occurrence of USUV infection in 2020 (Lawson et al., 2022), this is the first confirmed detection of the virus in the UK outside the Greater London area.

We appeal to veterinary surgeons and their clients to report sightings of sick or dead garden birds, with particular focus on blackbirds as a sentinel for USUV, to the Garden Wildlife Health project (GWH) via [www.gardenwildlifehealth.org](http://www.gardenwildlifehealth.org). Samples from garden birds examined by GWH during the active mosquito season (April – November) are tested for USUV and other flaviviruses by the APHA as a routine. As with any emerging disease, the investigation of potential cases plays a crucial role in the effort to monitor occurrence and impact and to detect changes in epidemiology in a timely manner.

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