

ES farm Land and Soil 2021-22 update

The preliminary objectives set by the group in 2021-22 consisted of:

1. To assess the diversity and abundance of bird populations across the Future Farm
2. To survey HAU hedgerows and the faunal assemblages associated with them (birds, mammals and invertebrates)

Bird group

After these objectives were formed the first piece of work done was the bird biodiversity survey, the aim of this work was to create a repeatable, low cost survey method which can be undertaken annually by staff to monitor breeding and wintering bird populations across the HAU estate. Eight permanent transects of 1km were set up across the estate and the first survey was conducted in Spring 2022. The purpose of the survey was to record species diversity, species abundance and spatial location. The survey was a success with 45 species (13 and 9 on the amber and red species list respectively) identified across 411 territories.

The next steps for the bird group includes:

1. Establish a management plan for Lapwings on site
2. Additional surveys of house martins, barn owls and kestrels
3. Engineering solutions to determine breeding success
4. Habitat management/creation for farmland birds

Amphibian group

The focus of this group was to continue with routine monitoring which will inform HAU Biodiversity Action Plans, management and maintenance decisions going forward.

One of many action plans was the pond management plan, the first stage was to determine the presence/absence of great crested newts (*Triturus cristatus*) using eDNA analysis to allow monitoring & mitigation. The sites surveyed were the engineering, main building, Black Brook, Newpool plantation, companion animal unit and sewage works ponds.

HAU collaborations

- Supporting farmland Birds – GWCT (Game & Wildlife Conservation Trust) and King's seeds
 - Hulled wheat – einkorn, emmer, spelt, macha and Timopheev's wheat – hold the grain tightly in hulls
 - May help fill the 'hunger gap' in bird mixes