

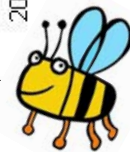
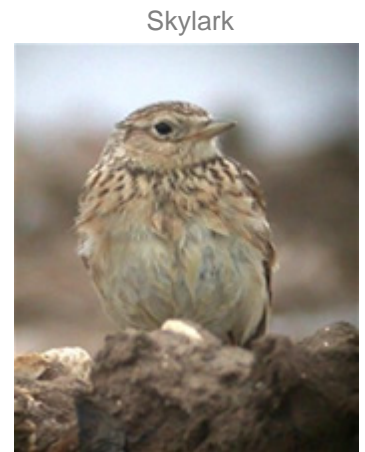
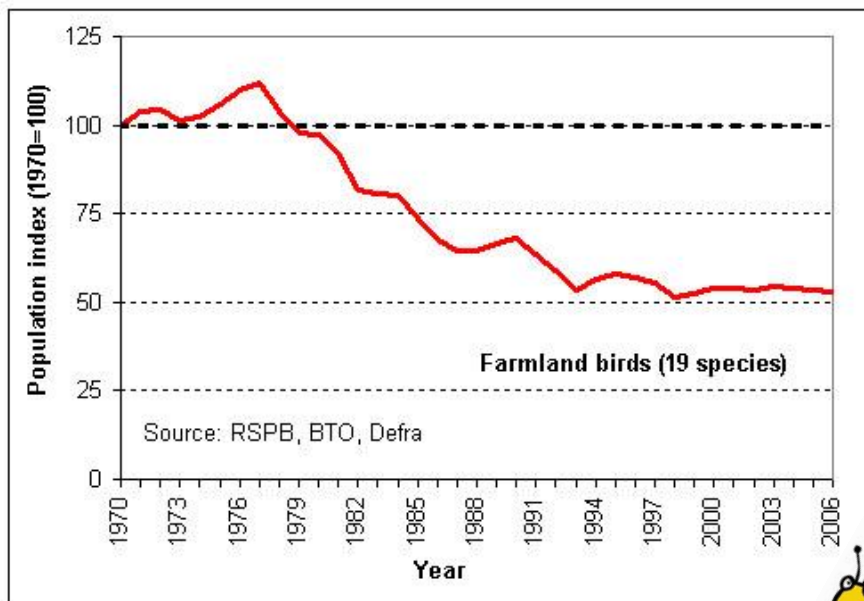


Biodiversity and birds

Arable farmland makes up around 20% of land in the UK. This farmland is a key habitat for many birds, including the skylark. However, modern agriculture which provides humans with more food leaves less for birds, and results in less biodiversity in the crop. This has led to a dramatic fall in some bird populations. Not only does a reduction in wildflowers mean there are less insects for the birds to eat, but there has also been a major reduction in available nesting sites for ground nesting birds like the skylark.

Cereals used to be planted in the spring, grown through the summer and harvested in the early autumn. Now, however, they are planted in the autumn, grown through the winter and are harvested in the early summer. The winter grown cereals grow too tall in summer for the Skylark which means that instead of having two nests each year they only have one, halving the number of chicks, which has contributed to a decline in the population.

Farmland birds are also seen as another good indicator species of biodiversity, and so finding methods to reverse their declining numbers is important.



Skylarks as farmland birds

The skylark is a small brown bird, larger than a sparrow but smaller than a starling. It has a small crest, which can be raised when the bird is excited or alarmed, a white-sided tail, and white wing edges. Skylarks are most famous for their song flight, vertically up in the air. As a ground nesting bird, the increasing mechanisation and taller field crops have led to a reduction in available nesting sites for them. Consequently, the UK skylark population has fallen by 60% in the last 40 years, earning the species a place on the RSPB red list for endangered species.





LEARNING ZONE — CLASSROOM



What is SAFFIE?

SAFFIE stands for Sustainable Arable Farming For an Improved Environment. The project aimed to show farmers how to more effectively manage crops and non-cropped areas, in order to significantly enhance biodiversity without compromising yield or efficiency.

How does it work?

The project developed a series of practical techniques which were designed to be both beneficial to farmland biodiversity and cost-effective to the farmer. These included:

- Field margin management, where planting wildflowers in grassy field margins increased beneficial insect populations by as much as 80%
- Preventing dense grass margins by occasional mowing, spraying selective herbicide or scarification (light cultivation) to open the sward and allow wildflowers to grow, flower and seed.

Skylark eggs and nest



The flowers help increase insect populations and provide a good source of food for many of the farmland birds.

The project also pioneered skylark plots, small areas of crop fields left unplanted. These are formed simply by not sowing seeds in two small patches (about 4m x 4m) in every one hectare of cereal. When the crop grows, the skylark plots (areas without crop seeds) become areas of low vegetation where skylarks can easily find food such as spiders and beetles. With these plots the skylarks stay in the cereal field and have a second nest and produce more chicks.

What are the UK results?

Over a 7 year period the skylark plots saw a 50% increase in the number of chicks reared, also benefiting buntings and finches. We now recommend all farmers to add these small skylark plots in the centre of their winter wheat, as they only present a very small loss of wheat yield. This combined with the open, flower rich field margins can result in an increase in other farmland birds, showing how effective careful environmental management of farmland can be.

For more information on the SAFFIE project visit the website at:

www.saffie.info or visit www.syngenta.co.uk/saffie

