



Airfields as vital green spaces

In Part II of **Steve Slater's** piece on Green Flying, he takes a look at the environmental benefits of airfields, large and small

Think about it. What's the biggest green space you visit? My bet is that for most of us it's our local airfield.

Airfields, whether a major airport or a small grass strip, are all vital green spaces. Even concrete jungles like Heathrow or

other major international airports have large areas of grass, or other open spaces. While they have to minimise wildlife and bird conflict with aircraft, there is increasing evidence from local nature and environmental surveys that all airfields are important as a low-insecticide, low-herbicide, sanctuary for plants, insects and associated wildlife.

We should remember too, that commercial air transport and airline operations are focused on just 25 UK airports. General aviation supports more than 120 aerodromes licensed by the Civil Aviation Authority for non-scheduled passenger carrying use, and we can add to that more than 500 unlicensed flying sites. These range from former military aerodromes to more modest airfields with asphalt or grass runways, privately owned 'farm strips' and helipads.

Above The circular, into-wind airfield at Bicester, along with its margins, provides the largest, most diverse wildlife reserve in the area.

Photo: Steve Slater

Imagine, that amounts to more than 650 nature reserves around the country.

From a Governmental point of view, they are a bargain. Most are privately owned and operated, and many are accessible to the general public. These airfields receive no government subsidies yet directly contribute to their local communities as a civic and visual amenity, through the generation of employment and by their payment of taxes and business rates. And because most GA airfields are in semi-rural locations, they are a focal point for outdoor activities for bikers, cyclists, ramblers, ornithologists, photographers and many others.

Ecologically important open space

The curtilage of airfields, the areas away from hangars, clubhouses and workshops, are ecologically important 'open green spaces', even when they are surrounded by what looks like 'green' farmland. That surrounding land is often the result of quite intensive agriculture with just one or two crop species being grown on ground which is regularly sprayed with fertilisers, herbicides or insecticides.



Left The different types and lengths of grass and flowers which would normally be restricted by herbicides, all add to the ecological value of airfields. **Photo: Michael Miklos**

Below Turweston's easily recognised solar farm, shrub planting and the solar power panels on LAA HQ all add to the airfield's ecological credentials. **Photo: Turweston Flight Centre**



In contrast, airfields offer a wide range of sustainable and diverse wildlife habitats both in their margins and even up to, and if it's a grass airfield including, the runway. There is certainly no incentive for an airfield operator to use fertilisers to make the grass grow faster, nor to use herbicides to increase crop yields.

I wonder how many of us have taxied out to the sight of rabbits or hares on the aerodrome, sometimes scuttling away or in the case of hares, pressing themselves into the grass for cover. Or after an afternoon's flight, when you have sat beside your aircraft and been serenaded by skylarks somewhere in the blue skies above you. Or perhaps on a grass strip you've heard the sound of the grass and wild flowers under your wheels as you swish into a perfect 'daisy-cutter' landing. They're all proof of an airfield's ecological credentials.

At airfields with grass runways, the mixture of mown runways and longer grass margins is a perfect wildlife sanctuary, with the longer grass around the runway providing nesting cover for birds such as skylarks and lapwings, and animals such as hares and voles. At the grass airfield at Stow Maries in Essex, an English Nature survey listed no fewer than 105 species of plant and nectar-giving flowers.

These drive populations of butterflies, bees and moths, which in turn create an eco-system, with other protected species such as sparrow hawks and owls taking advantage of the food chain. In fact, every British breed of owl has been recorded at Stow Maries, many of them living, nesting and hunting in the old buildings scattered around the former Royal Flying Corps WWI aerodrome.

Can we do more?

While we always should exercise caution when tree or shrub planting as it may encourage wildlife such as deer or larger birds into potential conflict with aircraft, the large curtilage of many airfields makes this practicable without creating any safety impact on flying operations.

Guidelines on risk mitigation and strategies such as 'long grass policies' adjacent to runways can be found in the CAA document *CAP 772*.

There is also scope for environmentally friendly development, including tree or shrub planting in airfield peripheries well away from flying areas, to act as carbon offsetting environments. In addition, areas such as disused runway beds and hangar roofs can be used as the basis for solar power arrays, which can operate without impacting on airfield safety.

One example of this is Turweston Aerodrome where the LAA HQ is located. The 720-acre site has had over 10,000 trees and shrubs planted in the past decade and it is home to an 18.4mW solar farm supplying the National Grid, while the main tower building and adjacent offices, including the LAA HQ, receive a significant proportion of their power from solar-generated electricity from panels on a hangar roof. In fact, Turweston, and it's not unique in this, has a 'carbon footprint' which can more than offset emissions by the aircraft operating from the airfield.

So, what next? Watch out in next month's magazine for the results of a research project carried out by our Engineering team on both (forgive the pun) current electric aircraft and watt – sorry – what technologies we might enjoy in the future. ■