

Fact Sheet

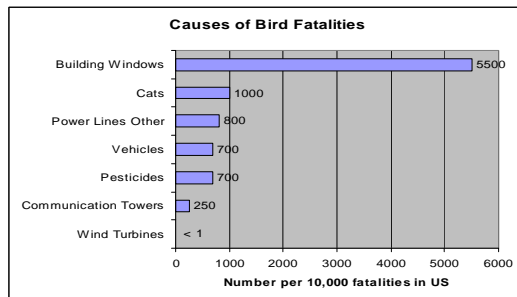
Ornithological Issues



The Royal Society for the Protection of Birds (RSPB) supports the sustainable development of renewable energy such as wind power because it helps mitigate climate change, which they believe "poses the most significant long-term threat to the environment" – this was also echoed in a recent report in *Nature*. It concluded that over the next 50 years climate change is expected to drive a quarter of land animals and plants into extinction and up to a quarter of the birds could become extinct. The RSPB described the report as 'a deeply depressing paper'. The RSPB further agree that developed alongside other forms of renewable energy and energy efficiency, wind energy has a key role to play in averting the worst of these impacts.



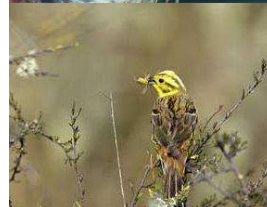
Studies carried out at the UK's and USA's existing large wind farms shows hit rates of less than one per turbine per year. To put this in perspective, cars in the UK kill more than 10 million birds – every year. Results of a US study are shown below:



Source: Erickson et al 2002 "Summary of Anthropogenic Causes of Bird Mortality" Proceedings of the 2002 International Partners in Flight Conference, Monterrey, California



The small wind turbines are a fraction of the surface area of the commercial turbines (less than 0.5%) so when scaling this type of statistic down to our small-scale type of equipment the rate drops even more dramatically to an almost non-existent figure! In addition to the scale factor, small turbines are at a much lower height (6-15m rather 50 – 100m) and the blades rotate at a much higher speed at about 400rpm. At this blade speed the birds see the turbine as a solid wall and so avoid it in the same way they avoid a tree or cliff whereas the larger turbines can confuse them as what they see as clean air can suddenly be a turbine blade. These facts coupled with the careful siting of our systems means that we can further protect the birds and help to ensure their long-term future.



There are many Proven wind turbines on UK off-shore Islands including the Shetlands, Orkney and Hebrides Islands. There is also one sited at the The Hilbre Islands Bird Sanctuary within the Dee Estuary on the north west coast of England. The Dee Estuary is a Site of Special Scientific Interest, a Special Protection Area, a Ramsar Site which is a Wetland of International Importance and a candidate for EU Special Area of Conservation.