

Tellería, J.L. 2009. Potential impacts of wind farms on migratory birds crossing Spain. *Bird Conservation International* 19:131-136.

Summary: Over recent years, Spain has undergone a huge expansion in the number of wind farms, many of which extend across regions crossed by migratory birds that winter in the Iberian Peninsula and Africa. This paper explores the potential impact these structures have on the massive flow of birds along the western Pyrenean flyway. Ringing recoveries of migratory Wood Pigeons *Columba palumbus* were used in the study to depict the movements of migratory birds and these were then compared to the distribution of wind farms. The main flow of pigeons (50% of ringing recoveries) was concentrated in a belt 50 km wide. Although the wind farms were mainly distributed outside this central belt, they intercepted an adjacent sector where a considerable number of ringed pigeons (30%) were recorded. This means that the two central bands (100 km wide) accounted for around 80% of the total number of Wood Pigeons crossing the region. These results suggest the need for a scrupulous evaluation of the potential impact of wind farms on migratory birds along this flyway, particularly the cumulative effect on populations crossing the region regularly. In view of the rapid expansion of wind farms in northern Spain, enforcement of the application of EU regulations on preventive measures to protect migratory species is urgently needed.