The most remarkable of migrants - four years of insect migration monitoring at a Pyrenean Mountain pass

Will Hawkes^{*1}, Toby Doyle¹, Scarlett Weston¹, Kelsey Davies¹, Richard Massy¹, and Karl Wotton¹

¹College of Life and Environmental Sciences [Exeter] – United Kingdom

Abstract

The Puerto de Bujaruelo mountain pass, situated above Gavarnie at 2275m, has been the location ofinsect migration research for over 70 years. In the 1950s Lack & Lack (1951) and Williams et al. (1956) recorded large numbers of insects from many different Orders migrating through the pass. However, between 1956 and 2018 no published monitoring of insect migration was performed at the pass. We present four years of intensive insect migration monitoring for the Autumn seasons of 2018-2021, the first whole insect assemblage study performed in the area during the migration season. Using modern technology, we were able to quantify for the first time the number of insects moving through the pass, as well as utilising continued trapping efforts to obtain a representative checklist of the migratory species. We found that millions of insects traverse the pass every year, with hoverflies making up a large percentage of the assemblage. We also show that the assemblage of migratory insects is diverse in the area and even the tiniest of Diptera show strong migratory behaviour. Coupled with fascinating research into the migratory behaviour of hoverfly migration from my friend and PhD colleague Richard Massy, this talk will showcase the fascinating world of insect migration which occurs during the Autumn in the Pyrenees.

Keywords: Migration, Discovery, Insects, Monitoring

^{*}Speaker