When I was asked by my friend and colleague Roberto Albertini to write a brief report about my activities for the Italian Association of Aerobiology web site, I have to admit that I did not really know what to write. Roberto suggested that I could share my experience and maybe write about aerobiological data in the United Kingdom. This is something that I have experience in, as I have a PhD in aerobiology (Smith 2004) and since 2004 my main task whilst working for the National Pollen and Aerobiology Research Unit at the University of Worcester has been to produce forecasts for allergenic pollen (tree, grass and weed pollen) for the whole of the UK.

However, this is not the limit to my experience. I also had the privilege to spend twelve months working with Alicja Stach at the Laboratory of Aeropalynology at Adam Mickiewicz University (AMU) in Poznań, Poland. I was in Poznań to assist in developing an aerobiology centre at AMU (Marie Currie Actions Transfer of Knowledge Fellowship). I benefitted greatly from the experience, as I left Poland with a number of lasting friendships and productive collaborative partnerships.

When Roberto asked me to write this article, he provided me with some background information about the Italian Association of Aerobiology (AIA). This information described how the AIA was founded when a group of researchers combined their efforts to develop and promote scientific interest in aerobiology. The AIA now has more than 200 members and a high International standing. The latter was confirmed when a former President of the AIA, Prof. Giuseppe Frenguelli, was elected President of the International Association for Aerobiology. I have been lucky enough to work with Prof. Frenguelli in the past (Smith et al. 2009), and this made me think about the importance of collaboration in advancing the science of aerobiology.

Due to collaborations with partners in different countries with different scientific backgrounds, I have been involved with a number of interesting projects that I might not necessarily have been able to attempt on my own. For example, I participated in studies that examined the transport of birch (*Betula*) pollen in Denmark (Skjøth et al. 2007) and the UK (Skjøth et al. 2009). These studies identified possible source regions of the pollen and helped to improve forecasts for this important aeroallergen (Fig. 1).

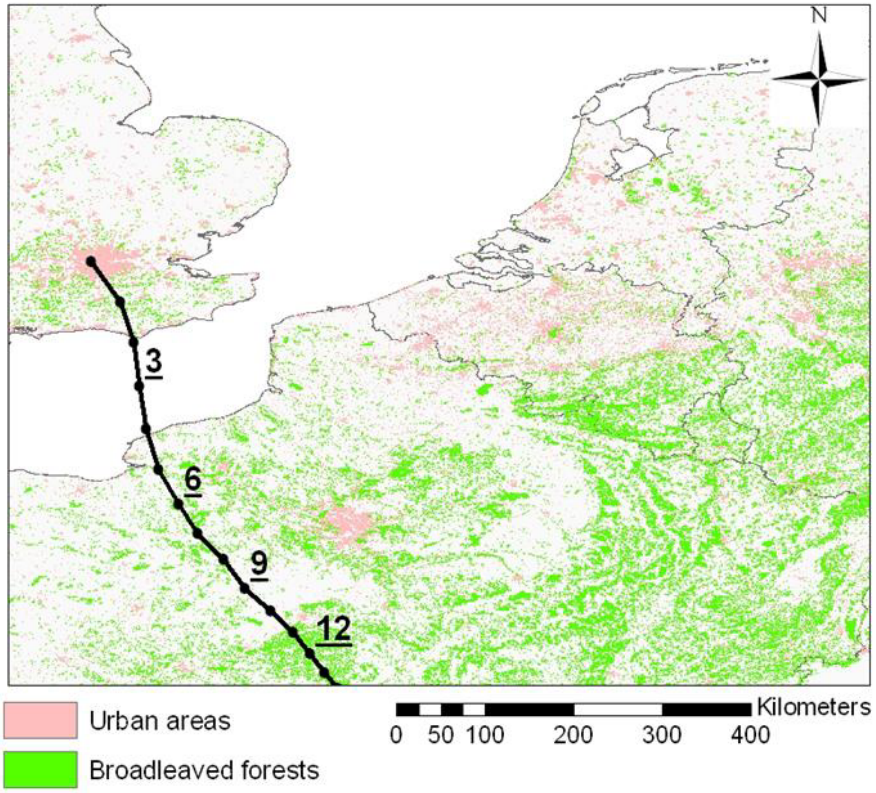

Fig. 1. Back-trajectory calculated at 02:00 BST on the 3rd April 2002, showing the location of possible sources of birch pollen arriving at the pollen trap in North London, UK (Skjøth et al. 2009).

I have also been involved in studies that have examined the atmospheric transport of ragweed (*Ambrosia*) pollen from the Pannonian Plain, which is one of the three main centres in Europe infected by this extremely noxious hay fever plant (the other centres being the Rhône-Alpes region of France and Northern Italy). These studies documented the northward transport of this pollen into Poland (Stach et al. 2007; Smith et al. 2008) (Fig. 2) as well as southward into the Balkans (Šikoparija et al. 2009).

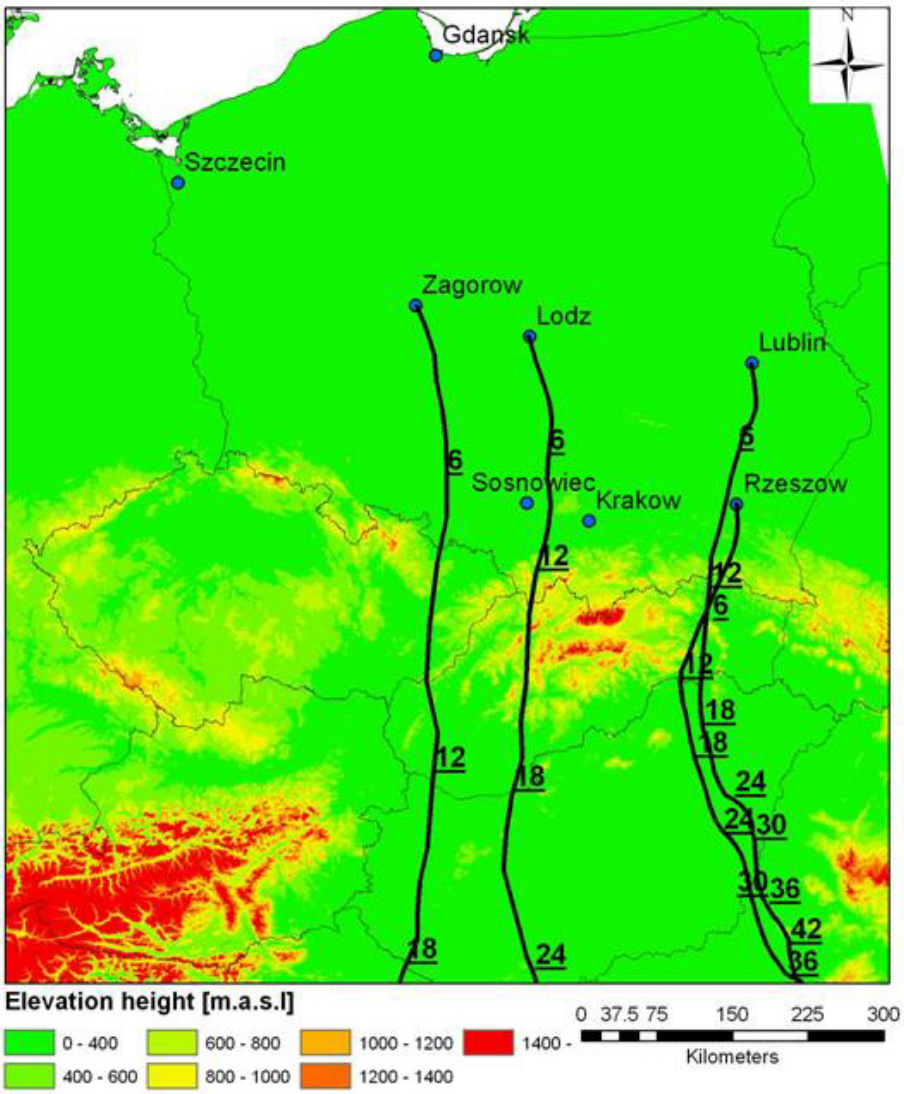

Fig 2. Back-trajectory analysis, start of run 08:00 on the 10th September 2005 from Zagorow, Lodz, Lublin and Rzeszow (Smith et al. 2008)

This work led to the production of a source inventory for this pollen type (Skjøth et al. 2010) that, it is hoped, will be the foundation for more advanced atmospheric modelling. In addition, a recent study identified Ukraine as a possible new source of ragweed pollen for Poland and therefore an important source area to of *Ambrosia* pollen on the European Continent (Kasprzyk et al. 2010). Such projects would not have been possible without the aid of collaborative partners. Of course, parts of Northern Italy are also

considered to be major sources of *Ambrosia* pollen and there is scope for further work in this area, such as producing a source inventory for the infected region.

In addition, it is worth mentioning that European collaboration in aerobiology has been promoted by COST Action ES0603 “Assessment of production, release, distribution and health impact of allergenic pollen in Europe” (http://www.unifi.it/COSTEupol/index.html). There is also an EU funded project entitled “Health Impacts of Airborne Allergen Information Network” (HIALINE), which examines airborne allergen concentrates and brings together researchers from across Europe (http://www.hialine.com/). I have been fortunate to be involved in both of these.

I would like to thank Roberto Albertini and the AIA for this opportunity to write about some of my activities. Above all, I would like to thank all the people who have been involved in the projects described here.

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