

Clare Gray Ecological Society of America's annual meeting in Baltimore, USA

The Society's travel grant allowed me to attend the Ecological Society of America's annual meeting in Baltimore, USA. This conference is one of the biggest ecology meetings in the world, with over 4000 registered attendees. This was an important opportunity for me as it allowed me to discuss my research with a huge number of like-minded researchers.

My talk summarised the results of my project investigating the effects of an accidental pesticide spill in the River Kennet, Wiltshire. The pesticide was Chlorpyrifos, an insecticide. Our work has taken a food web approach to characterise the direct impacts on the arthropods species to whom the pesticide was lethal. It also investigated the indirect effects on other taxa within the community. Indirect effects include larger and more abundant non-arthropod invertebrate species as a result of reduced competition, and larger more abundant algal species as a result of reduced grazing pressure.

We have continued to monitor the river as it recovered from the pesticide spill. Samples taken one year on from the spill indicate that the invertebrate portion of the food web have not fully recovered, compared to other portions such as the algae. The effects we have found on the structure of the food web have had an effect on ecosystem processing such as decomposition rates. We have found that invertebrate mediated decomposition was decreased immediately after the spill and recovered slowly until a year after the spill by which time it was back to normal. In contrast microbial mediated decomposition was higher in pesticide affected sites.

My talk was part of an organised session so I was able to present my results to an appropriate audience and I received a lot of positive feedback. I also attended many other sessions that were highly relevant to my work. I was able to meet researchers and set up new collaborations. I also enjoyed getting to know a new city, Baltimore (below).

Without this grant I would not have been able to afford to go to this conference, as the flights and hotel were very expensive, so I am very grateful to the Society of Biology for helping me get there.

