EuCan trip to La Brenne- a Report

The Alcon Blue (*Maculinea alcon*) is a near threatened species that can be found in boggy heath lands in central Europe, such as the area of La Brenne in France. Its lifecycle is somewhat interesting as it relies on 2 specific types of other organisms to survive. The adult butterfly lays its egg on the marsh gentian plant (*Gentiana pneumonanthe*), which is found growing in boggy areas. The *M. Alcon* caterpillar stays on the plant for the first four instars of its life, where it devours the plant and eventually drops to the floor. At this point the ant (either *Myrmica rubra* or *Myrmica ruginodis*) picks it up and takes the larvae into the colony's nest. Here the worker ants treat the butterfly larvae as one of their own, feeding and cleaning it. This is due to the chemical signals emitted by the butterfly larvae. These allomones mimic those produced by the ants own larvae. As the caterpillar grows it eats the ant larvae until it eventually pupates and escaped from the nest.

The status of the Alcon Blue butterfly is delicate because it so heavily relies on the presence of both the plant and the ant. The two species of ant that take the butterfly larvae into its nest are plentiful, but the Marsh Gentian is quite rare. It would seem that the solution to increase the abundance of the butterfly is to increase the abundance of this wild flower.

This has been one of the main aims of the European Conservation Action Network (EuCAN) team, a small team from the UK working in the Parc Naturel Régional de la Brenne in France this February. Our team of 15 was brought together as an initiative set up by the Kingcombe trust based in Dorset and in conjunction with the Dorset branch of Butterfly Conservation. The project is funded through the Leonardo da Vinci section of the European Union Lifelong Learning Programme, and invites people from all ages and walks of life to join in on a shared passion for wildlife conservation.

The area of La Brenne is one of 36 'Parc Naturel régionaux' in France, which is similar to the UK's national park system. It is comprised of well over two thousand man-made lakes that were formed in the middle ages for fish stocks. This vast wetland provides the boggy conditions and poor soils in which wildflowers such as the marsh gentian thrive, and thus great habitat for the alcon blue butterfly. The main aim for the EuCAN group was to clear the scrubland that is encroaching on these importantly diverse heathlands on a number of sites in the area.

As a team we proved our dedication to wildlife conservation through hard work and perseverance through cold and wet conditions and although (due to the time of year) there wasn't as much wildlife to see as the area usually has to offer, we were still greeted with some great sights, such as the flight of nearly 2,000 cranes over a beautiful sunset.

We were also involved in opening up ponds that were completely overgrown with scrub in order to provide better access for more wildlife and visitors. We also helped maintain the work that the same organisation had cleared the previous year and opened up a path through woodland that led to a bird hide with terrific views over the lake at La Touche On several occasions our team were also joined by a local group of young adults with learning difficulties, who helped to make a great difference to the conservation and biodiversity of the area.

Unfortunately however, it was pointed out to us by the staff at the Maison de la Nature, that despite their best efforts, over time the biodiversity of many of the lakes in the area has diminished. It seems that there are a plethora of reasons for this, but ultimately it relates to the conflict between landowners, fish farmers and conversationalists. Those that rely on the lakes to make a living need an optimum amount of space the keep an optimum fish stock; as a result they reduce the amount of vegetation growing in the lakes. A lot of the wildlife that is characteristic of La Brenne relies on this mix of vegetation. For instance, the Black Necked Grebe uses this vegetation to nest upon, and not only does reducing the vegetation reduce the amount of nesting sites, but the process of cutting out this vegetation wrecks nests and often kills/injures the young.

However, all is not lost. The team working at the Maison de la Nature are increasing their relationship with local landowners all the time and putting a great amount of effort into securing and improving the biodiversity of the area. Along with the support that visitors and groups like the EuCAN team provide every year, the future should be bright for animals such as the Alcon blue.