



## John Muir Award: biodiversity story

### The Orange Ladybird Survey Ballikinrain School, Stirlingshire

May 2010

In 2010, Ballikinrain Residential School pupil John McCafferty completed his John Muir Discovery Award by conducting a ladybird survey for the second winter running. This is his story.



Situated near Balforn in Stirlingshire, the Ballikinrain Residential School provides education for boys aged 8 to 14 years old who are experiencing significant social, emotional and behavioural difficulties.

Ballikinrain Schools commitment to outdoor learning ensures that pupils receive regular, frequent, and planned outdoor learning experiences following a bush-craft theme. This aims to encourage new skills, cooperation, team work, play, and environmental investigation. The pupils make use of a dedicated outdoor woodland classroom in the school grounds. John responded well to being outdoors.

**“I just enjoyed being out in the fresh air surrounded by different wildlife and being able to roam around the grounds at our school.”**

But it wasn't until he noticed orange ladybirds in the school grounds, and started counting them, that his enthusiasm for bugs flourished.

John decided to investigate further the life of the orange ladybird, and carry out a survey in the grounds. The results of the 2009 survey totalled 48 orange ladybirds.

John then drew up a management plan and helped put it into action. This involved leaving stands of young sycamore in place, and directing some of the outdoor classroom activities away from the preferred over-wintering habitat of the orange ladybird.

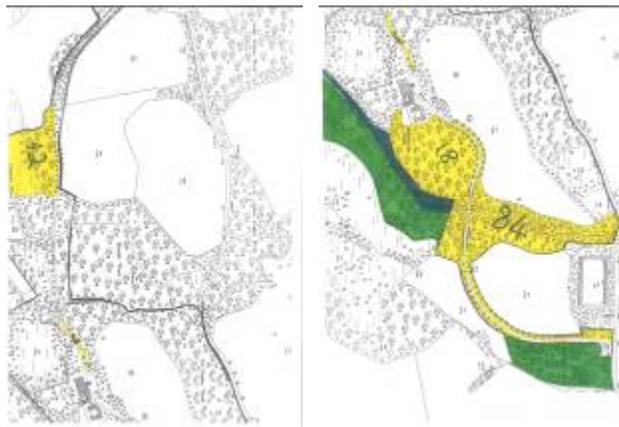
The impacts were significant. A total of 184 individual orange ladybirds were counted in 2010. John's results have been uploaded to the UK National Ladybird Register, and his findings will help the school outdoor education team develop their new woodland management plan.

**“It means I have achieved something special and I now look for ladybirds when ever I am out.”**

Andy MacKay, John's teacher, spoke of how the project and John grew together: "John cared about the ladybirds and this was absorbed into his work, resulting in him achieving much more than we had previously expected. The project has now taken him into the wider community, talking to local residents about how to survey their own gardens. The John Muir Award has provided a good structure, pulling together all the threads of the survey, and recognising his hard work."

### **A Buglife perspective**

Craig Macadam, the Scottish Conservation Officer for Buglife (Invertebrate Conservation Trust), offered his own congratulations to John: "Bugs are so important to our lives, they are fascinating, they are beautiful, and they provide many services, such as pollination, that we simply can't do without. The more we find out about bugs the better, so well done to John for taking the time to take a second look at bugs."



**John's maps of the school grounds**

### **An education perspective**

Kyle Fleming, Head of Education at Ballikinrain School expressed his support for taking learning outdoors: "... [it] develops confidence, independence, language and communication skills, as well as physical activity and mental wellbeing. A 'must have' for the new curriculum. The John Muir Award can produce tangible results with all who take part: from the most vulnerable young people to staff team development."

### **John's orange ladybird facts:**

- They range in size from 4.5-6mm and are orange in colour
- They can have between 12 and 16 white spots and even legs are orange!
- They like deciduous trees and in particular sycamore and ash
- They eat mildews (like a fungus)
- They're considered to be an indicator of ancient woodland
- They are attracted to light and are often found in moth traps



### **Special thanks...**

All orange ladybird images have been kindly provided by J.J. Kent. Check out his Flickr page for more inspirational images of bugs <http://www.flickr.com/photos/lummydays/>