Pheromone lure to attract longhorn beetles - a trial

Wendy Carter

Last July I saw a plea for help on Twitter; a handful of longhorn beetle fans were needed for a research project run by the Centre for Ecology and Hydrology and the Natural Resources Institute at the University of Greenwich. I wasted no time in registering my interest, spoke to both the Wildlife Trust and Natural England about running a pheromone trial in Tiddesley Wood near Pershore and became one of just fourteen people in the country to help run it.

Longhorn beetles are beautiful and fascinating but many species are of conservation concern because of their dependence on woodland (their larvae live in wood); they are also rather hard to find as adults. The trial had two aims: to develop a protocol for using pheromone lures to attract longhorn beetles to live traps and to develop a network of recorders for the non-native Asian longhorn beetle *Anoplophora glabripennis*. This latter point was important – whilst it was unlikely anyone running the trial would find it, to do so could have major consequences as it poses a serious threat to a broad range of trees (there is a legal obligation to report it: for more information see http://www.forestry.gov.uk/asianlonghornbeetle).

I received the trap and pheromones through the post in early August and headed out to Tiddesley Wood to find a good spot in which to hang it. A suitable field maple was identified and a simple winch system created to hang the trap above head height, just out of reach of curious passers-by (01). The idea was that the trap should be checked a number of times a week, daily if possible, and any longhorns photographed, marked (in case of recapture), identified and released.



01. Pheromone trap in situ 6 August 2015. Wendy Carter.

Whilst it was a little late in the longhorn season, there were some still around – I saw one or two *Rutpela maculata* in Tiddesley during August and several *Rutpela maculata* and *Stenurella melanura* in the Wyre Forest. But nothing in my trap. Or, for that matter, in anyone else's trap. The manufacturers of the pheromones were as surprised as we were – in their trials, the traps had been over-run with longhorn beetles. We don't know why longhorns weren't attracted to ours – a mere guess would have thought that from gardens to SSSIs across England, one of us at least would have had some success.

In all, the trap was in Tiddesley Wood from 7th to 29th August and it was checked almost daily. Despite not catching any longhorn beetles, I recorded and released more than half the by-catch. On top of this, my regular visits to Tiddesley Wood also meant I ended up having a bit of a wander along some of the rides and recording even more! Table 1 gives a list of the by-catch – recorded on the project's iRecord 'home' as well as submitted to the WBRC. I can only assume that the by-catch blundered into the trap by accident rather than being attracted to the pheromones. If any reader knows otherwise, I'd be delighted to hear from you.

It's hoped to run the trial again this summer (2016) but earlier in the year – and I hope to be part of it. Fingers crossed for a few longhorns!

Table 1 gives a list of the by-catch.

Date	English name	Scientific name	No.
08 August			
2015	Chestnut Tortrix	Cydia splendana	1
	Dingy Footman	Eilema griseola	2
	Common Wasp	Vespula vulgaris	1
	Thripps sp		30+
	A Rove beetle	Tachyporus solutus	1
09 August	A predatory bug	Deraeocoris	
2015	(02)	lutescens	1
11 August		Deraeocoris	
2016	A predatory bug	lutescens	1
13 August			
2015	Dingy Footman	Eilema griseola	3
	Common	Forficula	
	Earwig	auricularia	1
	J	Dromius	
	A ground beetle	quadrimaculatus	1
14 August	Copper	Amphipyra	
2015	Underwing agg	pyramidea	2
	Scorpion Fly	p)	
	(male)	Panorpa germanica	1
	Scorpion Fly	- the grander	
	(female)	Unidentified	1
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	A micro-moth	Mompha langiella	2
15 August		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
2015	A micro-moth	Mompha langiella	2
	Lesser-spotted	g , , , , , ,	
	Pinion	Cosmia affinis	1
	A Tortrix	Epinotia	
	micro-moth	immundana	1
	A Springtail	Orchesella cincta	2
18 August		Dicronopalpus	
2015	A Harvestman	ramosus	1
24 August		Leiobunum	
2015	A Harvestman	rotundum	1
		Calningue muficallia	1
	A beetle (03)	Salpingus ruficollis	1



02. Deraeocoris lutescens 11 August 2015. Wendy Carter.



03. Salpingus ruficollis 24 August 2015 . Wendy Carter.

Acknowledgements

Thanks to both Worcestershire Wildlife Trust and Natural England for permission to run the trial in Tiddesley Wood SSSI. Many thanks to everyone who helped to identify some of the by-catch!

Thanks also to Dr Michael Pocock of the Biological Records Centre at the Centre for Hydrology and Ecology and Professor David Hall of the Natural Resources Institute at the University of Greenwich for giving me the chance to be part of it.

Images

- 01. Pheromone trap in situ 6 August 2015. Wendy Carter.
- 02. Deraeocoris lutescens 11 August 2015. Wendy Carter.
- 03. Salpingus ruficollis 24 August 2015 . Wendy Carter.