

concentrated in has been used by the slow worms as a crèche, with the artificial refugia being more beneficial to gravid females and young as opposed to sub-adults and males. If this is the case then this is the first recorded instance of this behaviour, although further research is needed to investigate this.

The survey area did contain some old and severely deteriorated felt tiles before our study began and these were removed prior to our study. These had been *in-situ* for a number of years and when the pre-survey visit was conducted these were the only places where slow worms were seen.

Fish (2016) found that juvenile slow worms preferred felt compared to other artificial refugia materials. Roofing felt was the only material used to survey the slow worms in our study, due to its ease of availability and relative low-cost compared to other potential materials. We believe the use of roofing felt may have produced a microclimate that was favourable to the hatchlings and yearlings compared to the other age classes; this may be due to their small size. In the future, refugia of different material types should be used in order to compare the difference in preference between adults and juveniles. A small number of individuals also showed signs of scarring, which can be linked to predation (Smith, 1990). The gravid female seen on multiple occasions under the same felt may have been inactive due to the condition under the felt being optimal for her (Hurst & Hubble, 2006).

With this in mind, future surveys will expand our search area to see if the initial study site is indeed acting as a site where females prefer to give birth due to its secluded nature and absence of disturbance. Expanding surveys will also allow us to investigate how far the slow worms have dispersed since their initial introduction to Wandlebury. This is important to take into account as it may influence land management protocols on site, in order to make areas of habitat more favourable to the slow worms. It's also important to map their current distribution so that the population can be monitored in the long-term regarding distribution, population density and population structure.

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References

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New records of midwife toads (*Alytes obstetricans*) in Cambridgeshire

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In recent years the Common Midwife Toad (*Alytes obstetricans*) has been recorded at two sites within the county of Cambridgeshire. A non-native species, it is mainly restricted to

urban areas, with the first recorded population in the UK found in Bedford in 1903 (Beebee & Griffiths, 2000). Since then, the toads have been spread around the country with new populations being recorded frequently. This spread has taken the form of both deliberate and accidental introductions as well as the toads themselves dispersing. In Cambridgeshire, one population is in Cambridge and the second is in the village of Thorney, east of Peterborough. The Cambridge population is quite sizeable, estimated at around 100 individuals, although further surveys are needed to confirm this (Allain & Goodman, 2018). The population at Thorney comes from a record of tadpoles in an agricultural drainage ditch. It is not known whether or not the population is still viable, and further investigation is needed to confirm their presence.

The Cambridge population has been present for over a decade, restricted to the rear gardens of a small number of properties near the city centre (Baker, 2007). Our investigations have primarily focused on population size and disease screening. DNA samples have been taken, which when compared against an online database, show that the toads originated in northern Spain. . Recently it has come to our attention that another long-established population of Midwife Toads exists within Cambridgeshire, in the town of St Neots. The toads are present in a residential area in the north-west of the town, where they are unlikely to spread far.

Being approximately 16 miles away from Cambridge, a separate introduction event in St Neots is more likely than dispersal. Whether this was via the pet trade, either accidentally or intentionally, is not known. In the future we aim to take a DNA sample from the population in order to carry out a similar analysis to that completed with the Cambridge toads. From the data that we have collected so far and from communication with local residents, we believe that the St Neots population is a lot smaller than the Cambridge one. The toads were first identified due to their electronic bell-like call and have been observed to be breeding over the past couple of years. At present they can only be found in a small number of gardens, living in water features and small ponds. All records have been submitted to CPERC and future monitoring of the toads is planned.

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Cambridge Amphibian Survey Report 2017 Steven J. R. Allain & Mark J. Goodman

Introduction

For the past five years, the Cambridgeshire and Peterborough Amphibian and Reptile Group has been actively surveying a number of amphibian sites across Cambridge and the surrounding area. The goal of the ongoing project is to monitor bodies of freshwater for signs of amphibians and gather long-term data on population trends. This mostly involves nocturnal searching for adult amphibians, during the breeding season from March to June (although some preliminary surveys were undertaken to check for early signs of activity).