

Sid Valley Bat Research Project



2015 - 2016 Summary Report
For: NINEVEH Trust

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Executive Summary

- The Sid Valley Bat Research Project was initiated in 2015 and has included around 100 people on a voluntary basis to date, of all ages from 8 to 80.
- Awareness has been raised through presentations and walks within the local community which were filled to capacity every time.
- Research has been conducted through walked surveys undertaken by members of the public and bat ecologists along with data collected through the placement of static detectors with the data analysed through computer software.
- Research has also been undertaken through bat catching sessions with harp traps and mist nets; with involvement with local bat group, the Devon Bat Conservation and Research Group (DBCRG), which includes bat ecologists from across the South West.

The outcomes have included:

- 24 roosts have been identified - 16 roosts of more common species within the valley and 7 roosts of species with a higher level of protection
- Recognition of the River Sid as an important flyway and foraging ground to 10 of the species present in the valley.
- Identification of woodland supporting a variety of species and providing a high level of foraging opportunities
- The outcomes of the project have been displayed and presentations at meetings and events of other organisations have taken place which has attracted many more people to sign up to be involved in the project for 2017.

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1. Introduction

The Sid Valley Bat Project was initiated through Sidmouth Science Festival in order to create a biological based project to broaden the education of science through the region. An interest in bats within the valley by the public had already been established with a presentation and educational bat walk having already been initiated prior to the start of the project.

2. Background

The Sid Valley is situated in East Devon, central grid ref SY142929 with the River Sid Running North to South. The valley comprises plantation, mixed and ancient woodland with various types of agriculture and pasture which provides a good variety of suitable environments to support bats along with a large number of houses dating pre 1980 which also provides suitable roosting features for bats.

Very few records of bat species had been recorded in the Sid Valley with the probability of 16 of the 18 species native to Britain been highly likely to be present in the valley, including species whose population numbers are thought to down to a few thousand.

Sidmouth Science Festival has been running since 2012 and has been expanding from events over one weekend to events throughout the year. It focusses on the STEM subjects and wanted to include a greater degree of biological content as well as feeling that it was suitable to run a longer term project within the festival schedule. A presentation and bat walk was already planned for 2015 and expansion of this subject seemed ideal.

3. Objective

The objective of this project is to raise awareness of the issues that bats face within the environment and to identify bat species and there flyways in order to advise land owners on management practices that will enhance the valley for bats along with a wide range of other species. This will provide records which will help to increase conservation in the valley for the future. The information will also be used to educate people about wildlife and inspire people of all ages to appreciate conservation issues with public involvement from the community being encouraged in order to engage them fully with the issues.

4. Funding and support

- A grant of £5033 was provided by the NINEVEH Trust
- Support of basic bat detectors from the East Devon Area of Outstanding Natural Beauty
- Equipment from Adrian Bayley
- Voluntary hours from organisers and members of the public
- Devon Bat Conservation and Research Group

5. Equipment

Initially it was thought that the equipment list was appropriate for taking the project forward to gain the maximum information although on the initiation of the project it was realised that the money would achieve better results spent on more survey recording equipment rather than on a very expensive lure, with another being kindly offered for use from Adrian Bayley, a member of the Devon Bat Conservation and Research Group. A harp trap was imported from Australia at a very low price and mist nets were purchased.

Also many of the sundry items have been very kindly lent for use by individuals involved in the project, freeing up money for 2 static detectors (Anabat Express) which would give a large number of bat sound recordings, enabling a greater efficiency in focussing the catching equipment in the most effective areas. These detectors contributed to the project by achieving the confirmation of flyways and foraging grounds at a much faster rate than would have otherwise been achieved.

The advance of detectors was then deemed to be of great advantage to being interactive with the public as the real time calls of bats and easier identification of them in the field was available therefore creating a much improved hands on experience for education and comprehension. An Anabat Walkabout was purchased in order to improve surveying results and educate.



Anabat Walkabout



Anabat Express



Harp Trap

The funds still available will be spent on some of the sundry items not initially purchased

Sid Valley Bat Research Project					
Income				Expenditure	
grant	£ 5,033.00			mist nets	£ 74.48
				poles and bags	£ 131.75
				guy rope	£ 10.60
				pegs	£ 4.49
				scales	£ 8.49
				harp trap	£ 1,820.40
				anabat express 1	£ 627.00
				harp trap delivery	£ 61.00
				anabat express 2	£ 774.00
				anabat walk about	£ 1,320.00
				anabat walkabout screen protector	£ 10.00
				anabat walkabout case	£ 36.00
				anabat express microphone cable	£ 42.00
	£ 5,033.00				£ 4,920.21
balance		£ 112.79			

6. Method

Several approaches were used in order to gain information; from gleaning information from the public and through the internet, walked transect surveys, static detector surveys and bat trapping surveys.

Interest in the project was initially gained through a talk and walk from the Town Council offices in 2015 and by approaching the Devon Bat Conservation and Research Group. Further interest from talk in 2016 gained more volunteers from the local community who then attended a further meeting about survey techniques. These people were then given bat detectors from the AONB to conduct walking transect surveys to identify bat flight paths along with static bat detectors funded from the NINEVEH trust on property of members of the public who knew there was high bat activity present. This data was then analysed using Analook software to identify the species present.

Bat trapping was then used in areas where high activity and rarer species were identified. Skilled members of the Devon Bat Conservation and Research Group examined bats caught with members of the public observing.



Members of the community and DBCRG processing caught bats

The outcomes of the project have been displayed and presentations at meetings and events of other organisations have taken place which has attracted many more people to sign up to be involved in the project for 2017.







Setting up a harp trap within woodland

7. Survey results

- The bats species already to known within the valley were lesser horseshoe, soprano and common pipistrelles, brown long eared and noctule bats.
- The new species recorded since the beginning of the project are lieslers, serotine, nathusius pipistrelle, barbastelle and greater horseshoe bats. Greater horseshoe and barbastelle bats are listed in Annex II of the Wildlife and Countryside Act, these are bats that have extra legislative protection.
- Baseline measurements of age, sex, weight, health and breeding condition have been taken in order to establish changes reflecting the population dynamic and distribution of species.
- The bats species still to be identified are Bechsteins and grey long eared which are very rare bats. These bats are present within 10 miles of the valley therefore their presence is highly likely.
- Flyways of greater horseshoe from a large important roost have been identified which has contributed to the Devon Greater Horseshoe Project run by Devon Wildlife Trust.
- 16 roosts of common species within the valley and 7 roosts of uncommon species have been identified
- Recognition of the River Sid as an important flyway and foraging ground to 10 of the species present in the valley.
- Identification of woodland supporting a variety of species and providing a high level of foraging opportunities

Results of the Sid Valley Bat Project 2015-2016



-  Roost of bat species with special protection
-  Bat roost
-  Flyway
-  Foraging ground used by a minimum of 4 species

8. Stakeholder engagement

Involvement with the below has been initiated:

- Local residents
- Major land holders within the valley
- East Devon AONB
- Devon Bat Conservation and Research Group
- Devon Bat Group
- Devon Greater Horseshoe Bat Project
- Devon Biodiversity Records Centre

9. Evaluation

The outcomes of finding new species and new flyways have been achieved, new roosts have been identified and awareness of the issues surrounding the conservation of bats has spread through the community from individuals to land owners. A high level of interest and involvement has been gained in the project from all stakeholders.

Continual surveying will improve further our knowledge of bats and how they use the wider landscape therefore building on previous knowledge gained throughout the country which can then be applied to the Sid Valley. Public awareness events and community involvement will increase the knowledge of the community in how to best support the needs of bats and a wide range of wildlife including insects, birds and mammals which gains from land management improvements provided for bats. Planned surveying on the land of large land holders will involve them in the project, therefore providing information for them to be able to make land management decisions.

A Natural England project licence relating solely to the valley was not gained this year due to complexities relating to the application. This was not an issue as the project was able to work under a Devon wide woodland licence issued to Adrian Bayley.

10. Conclusion

A high level of success in raising awareness of conservation issues surrounding bats within the local community, with research information being gained to create an increase in the understanding of which species of bat are present and how they are using the valley was achieved. Continual surveying and networking will further improve our understanding of the ecology of bats at present with long term surveys identifying the distribution changes and help to managing those changes.

11.Recommendations

- Bat trapping and surveys to be implemented focussing on the River Sid and wet grassland areas for 2017.
- Engaging major land owners to survey on their property and provide land management advice.
- Leading bat survey transect evenings to improve volunteers identification of species.
- Increasing the number of bat trapping surveys and involving the local community to a greater degree in those surveys
- Increase involvement with the younger members of the community (the scouts are being involved in 2017)
- Continuing presentations and walks in order to attract more volunteers and raise awareness.
- Reapply for the Natural England project licence this year which will focus on the Sid Valley