

Evaluation report of The Biodiversity Training Project 2006-2011 –HG0500454



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Introduction

The Biodiversity Training Project (HG0500454) was a 5-year project funded by the Heritage Lottery Fund (HLF) (89.9%) and the Field Studies Council (FSC) (10.1%). It was aimed at promoting, enhancing and encouraging biological recording in Shropshire and the wider West Midlands region. This was done by running a number of training events; either directly, or indirectly, by funding other local organisations to do so. As well as this support was given to a small number of new tutors to increase their confidence and skills in front of students and support their personal learning objectives. A short research paper examining the need for accreditation within the volunteer sector was also undertaken.

The project ran from the beginning of May 2006 to the end of March 2011 and was supported by a steering group consisting of the Project Officer (PO), Sue Townsend - FSC Head of Centre at Preston Montford, Jennie Comerford - FSC Grants Officer, Clive Dean – Shropshire Council, Dan Wrench – Shropshire Biodiversity Officer, Fiona Gomersall – Shropshire Wildlife Trust, Tom Wall (replaced by Simon Cooter in 2010) and Joan Daniels of Natural England, and Harriet Carty – HLF monitor.

A formal launch took place in February 2007 and annual programme launches were held at Preston Montford each spring. A final project celebration was held in November 2010. The project also supported and ran Shropshire entomology days in February 2010 and 2011. A full breakdown of all events can be found within the full text of this document.

Project targets and outcomes

At the start of the project targets were set for the number of events and participants;

- Training units – 121
- Volunteers trained – 290 minimum individuals with 1180 volunteer days
- Minimum 545 show interest in events
- Minimum of 10 taxonomic groups

- New training resources developed

It is pleasing that each of the targets were exceeded during the project.

A total of 206 events were funded by the Biodiversity Training Project and a total of 849 people attended the courses. The table below (Table 1) illustrates a full breakdown of each year with number of courses per year and volunteer training days listed. The volunteer training day value was calculated by combining individual volunteer hours (full days and half days) then dividing the total by 7 to represent a 'volunteer day'. Attendees to the official launch, annual programme launches, the final project celebration or either of the Shropshire entomology days are not included in these figures.

Year	Events (training units) Held	Volunteers time (days per year)
2006	12	571
2007	56	655
2008	45	454
2009	43	478
2010	50	502
Totals	206	2660

Table 1 – Course totals per year

Each year a theme was chosen to represent specialist Biodiversity Action Plan (BAP) habitats in the county and wider region. These habitats were heathland, woodland, grassland and agricultural habitats, and wetland / rivers. Courses were aimed either at the identification of taxonomic groups within a certain habitat or purely by taxonomic group as appropriate, or aimed at teaching the methodologies associated with them or biological recording.

Subject Area	Percentage of training units (%)
Botanical id (higher plants)	36
Insects and invertebrates id	36
Biological recording	11
Bird id	8
Bryophyte id (lower plants)	3
Fungi and micro fungi id	2
Habitat id and mapping	2
Climate change	0.5
Bats	0.5
Small mammals	0.5
Reptiles and amphibians	0.5

Table 2 – summary of training units during project

Only small numbers of courses on bats, small mammals and reptiles and amphibians were held as active local recording groups were already meeting the training need in those subjects.

The demographic of volunteers was interesting as traditionally natural history or biological recording has perhaps had the image of belonging to a certain type of person, particularly entomology or bryology perhaps. Using figures from the final year of training (2010) the gender split was 54% women and 46% men. Table 3 illustrates the split between age groups of all volunteer days for that year.

Age range	Male (%)	Female (%)
20-30	19	9
30-40	10	12
40-50	13	10
50-60	18	8
60-70	40	61

Table 3 – Age demographic of participants in 2010.

The project was designed to cover Shropshire and the wider region, however most of the courses were held in Shropshire with the following exceptions; Edgbaston (Birmingham), Stoke, Cannock and Lake Vyrnwy. This was due to the limitations of a single project officer's time and the distances involved in arranging courses a distance from the project base.

Volunteers were mostly from the Shropshire and wider West Midlands region however a few people did pick up on the events from further afield and two individual people travelled from Somerset (on different occasions) to attend. They both cited the lack of similar free training in their home region. One attendee travelled because of the taxonomic subject (solitary bees) and the other travelled because of the expert tutor (Garth Forster – national aquatic beetle expert). One volunteer travelled from Berkshire and another from Cambridgeshire. Table 4 illustrates the percentage volunteer days per region travelled by attendees during 2010.

Region	Volunteer days per region during 2010 (%)
Shropshire	62
West Midlands (including Staffordshire conurbation)	20
Wales	10
Herefordshire	5
Staffordshire (outside of West Mids conurbation)	2
Cheshire	1

Table 4 – volunteer days per region travelled from for 2010 training courses

The wider FSC has overseas partners and carries out projects with a wide range of countries. Due to this overseas visitors regularly visited the FSC during the tenure of the BTP and a couple of people came out on courses where appropriate to see how people were trained. We therefore we were able to welcome a couple of visitors from Taiwan, and a visitor from Ukraine, who was inspired enough by the BTP to take the experience back home and set up

something similar called the Eco-trail Zhuravlynnna (Crane) funded by Matra biodiversity and the nature conservation program of the Embassy of the Kingdom of Netherlands.

Tutors and new tutors

Tutors were mostly sourced from within the local region with the exception of the aforementioned Garth Forster (Edinburgh), Keith Alexander (Exeter – deadwood invertebrates), and Clare O'Reilly (Durham – botanical identification and using a key). These three tutors are deemed amongst the national experts in their particular fields. Many regional experts also ran courses for the BTP including; Sarah Whild (botany), Alex Lockton (biological recording), Nick Mott (White-clawed Crayfish), Cath Price (small mammals), Mark Lawley (bryophytes), Allan Dawes (bird recording), Don Stenhouse (beetles), Chris Walker (botany), Dave Grundy (macro lepidoptera), etc.

New tutors were encouraged and supported through the project. This was a particular exciting outcome with three tutors in particular who have gone on to teach technical taxonomic subjects. Below are three case studies.

- John Handley was new to teaching but had been a regular attendee on botanical courses.

'John Handley'

When I first became involved in the courses offered by the Biodiversity Training Project, BTP, I had a clear aspiration to learn about wildflowers as a means to obtaining a job in the conservation sector. Such jobs generally require several years of paid or voluntary experience, neither of which I possess.

I became aware of the courses offered by the BTP in its second year, I was able to do a few courses and then take a Field Identification Skills Certificate, FISC, which allowed my skill

level to be assessed independently by the Botanical Society of the British Isles, BSBI. I was deemed to be a level 2 at this stage;

Some ID skills – can ID common flowering species, for example but not capable of producing a comprehensive site list. No grasses, sedges or ferns, but some rushes. May have attended one or two ID courses but not familiar with collecting and refereeing of voucher specimens. Unlikely to be a member of relevant recording society although may be a member of a local recording group. Uses common names.

This also helped because it provided me with the feedback which allowed me to target which courses would be of most benefit to me. The more courses I was able to take, the more my identification skills improved and the more they improved the more confident I became until the time came to submit records to my Vice County Recorder – Dr Sarah Whild.

The feedback from submitting my records allowed me to further target the BTP courses which would prove beneficial. I undertook a second FISC where I discovered that I had improved considerably to a level 4;

Good ID skills in one group – could be commissioned to survey a site for vascular plants but may miss sub-species and hybrids. Reasonable on grasses, sedges and ferns. Member of relevant recording society. Should automatically submit records. Should use mostly scientific names.

I have been submitting records regularly over the last few years and with encouragement and support I have become the secretary for the Shropshire Botanical Society and member of the BSBI which has also supported my development. Earlier this year I was invited to attend a 'Training the Trainers' course held by the BSBI. I was also able to attend the 'Recorders conference', both courses I found enormously beneficial. This year, for me, has culminated in being asked to teach a course on the top ten flowering plant families for the Field Studies Council next June. A great privilege and the fulfilment of my aspiration.

- Mark Duffell was also new to teaching but lacked confidence and needed support.

'Mark Duffell about the project'

I have been involved in the BTP since it first began, initially finding out about the courses via the local recordings societies wildlife trust which I was active in. At the beginning of the courses I had some good but basic identification skills in botany, but I was not using these in any meaningful or structured way. The BTP allowed me to select areas in which I felt my skills were lacking and so I progressed quickly. The BTP project courses were always well structured with knowledgeable (and enthusiastic) tutors who guided students towards a more rigorous approach to recording biodiversity. At the time of the courses I was registered disabled, but had a desire to increase my skills for future gainful employment. The fact that these courses were free and material, publications etc freely available to use on the course was of immense benefit (e.g. being able to field test an identification guide before having to purchase it). During the period of the BTP project (and in part due to it) I enrolled on an MSc in 'Biological Recording: Data Management and Species Identification'. I completed this in 2010, and consistently achieved high marks in the field identification tests down in no small part to the BTP.

I had a desire to share the knowledge that I had learnt and so to be asked to teach was a real boost to my confidence as well as helping my CV. With Mr Boardman's support I have over the past three years led three courses and this year I will be leading a total of five widely varying courses as well as a series of evening botany coaching sessions. Since then I have led several paid courses for the Field Studies Council and the University of Birmingham, as well as leading walks for the Shropshire Botanical Society and Montgomeryshire Flora Group.

The project has helped me to:

- Improve and widened my identification skills (I took a Field Identifications Skills Certificate at the start of the course and after two years had gone up a level).
- Have a taster at some taxonomic groups that I would not normally have tried before.
- Gain confidence in my abilities to correctly identify difficult species.

- Submit records continuously and accurately. I recorded more than 8000 plants in 2008 the 3rd highest recorder in the county for that year (behind two professional 'full time' recorders).
 - Gain confidence to lead and teach taxonomic and habit groups to students.
 - Empathises with students at all levels of learning and employ a variety of techniques to help them with their study.
 - Manage groups in all weathers from blistering heat to absolutely torrential rain, despite which the group continued to smile.
 - Re-affirmed that I would like to continue teaching as a long term employment goal.
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- Ian Cheeseborough was an inexperienced teacher who lacked confidence but was passionate about his subject.

'Sue Townsend on Ian'

I have known Ian Cheeseborough since 1996 when he was working for the Shropshire Wildlife Trust as a conservation volunteer leader. He developed an increasing interest and skill in entomology and became self-employed to pursue a combination of practical conservation and survey work. He had little formal training being largely self taught – and gained skills through dedication and hard work. He was a natural course member on the project courses and we quickly realized that he was invaluable in mentoring and encouraging people to take an interest and record insects for the county. His knowledge and enthusiasm were already there – and Ian has added a progression of skills in supporting others in making records. He is now County Bee recorder and has led insect and bee courses for the Project – He has had many 1sts including a 2 day fully taught course led by himself for the Field Studies Council, talking to a group from the Shropshire Women's Institute of over 70 and 8 full teaching days with the BTP.

Ian Cheeseborough

“I think that Project has helped enormously in encouraging me to learn more about my subject and the skills and confidence to deliver this knowledge to others. I have witnessed many people become more able to submit county records and am very keen to see this continue as I recognize that many people need more time and support to learn the skills of invertebrate recording. The project courses have helped me to understand those orders of insects in which I have less experience and working with other tutors has helped me see how best to deliver aspects of identification training to others

Volunteers

The volunteers who came on our courses were subject to questionnaires concerning a variety of issues about the project and were given feedback forms for part of the project. They were asked about feedback of individual courses and tutors, suitability of venues, the course and its direction, plus important issues such as accreditation and their needs as recorders. They were also asked why they volunteered in the first place which provided an interesting insight garnering 27 different reasons. Of those asked at the launch of the project only 28% considered that biological was adequately supported. It would be hoped that if a similar question was asked in 2010 a higher response would be achieved. A very high percentage of respondents suggested species identification courses and monitoring techniques courses were the main thing needed to improve skills in the county.

At the final end of project celebration a number of volunteers who attended courses during the final year of the project were asked to score their personal progression on a 1-10 grid stating their experience in the subject before they started the course and then after the course. On the grid 1 marked nil or little experience and 10 marked total expertise. The average distance travelled in terms of skill and confidence in identification, on a 10 point progression scale was 3.1. This shows a general good level of progression across the different subject areas.

A number of volunteers submitted feedback on how the BTP had helped them improve their skills;

Annie Hazlehurst; "For me biodiversity training started at the beginning of the programme in 2006. As a Shropshire Wildlife Trust volunteer I needed to know what was going on around me and the BTP seemed to be a good way of doing that. I think it is important because greater understanding makes for a more effective volunteer. Year on year my identification skills have improved, and that improvement is due to the goals that I have set myself and the courses I have attended in order to achieve these goals. The biodiversity training courses have played a very important part in that progress. There has never been an occasion when I've felt embarrassed by my lack of knowledge and this is mainly due to the teaching skills of the tutors and the attitude of the other students. We are all so keen to learn!"

Penny Wysome; "Firstly, thanks very much for allowing me to do the Hedgerow course last weekend; it was revelation as well as being fantastically useful. All experts seem to make you look at things differently and Barry was no exception. Much of what we did has carried directly into this week's woodland monitoring.

Secondly, thanks are due for the Mosses day course from the Biodiversity programme. Like the grasses one last year it was a valuable introduction to a diverse but sometimes impenetrable group of plants. Despite the best of intentions many of us cannot get to grips with these without being taught how to look at them. Clearly it will take many hours practicing to become a safe identifier, but the guidance provided as well as the excellent clear key has left me able to approach a strange moss with at least some idea of what to look for, and what the descriptive terms mean. I have recently realized quite how much I took away from last year's grass course despite at the time feeling that I would never remember the names, when I began to look at grasses this year. Astonishingly I can make some sense of the keys and my repertoire of reliably identified species is growing - slowly! I imagine the mosses will have a similar time lag. I am sure other participants must feel the same."

Bill Waller; "I would just like to say how much I valued the Sedges and Rushes course held on 25th June at Aqualate Mere.

The lecturer was very good, and the site contained a really good variety of plants. Speaking to other attendees at lunch the overall feeling about the course was very positive. Everyone got a lot from the training.

I have been able to put to good use the knowledge I gained, and have updated many site records to now include sedges and rushes. I was even able to discuss sedges on a nature walk I gave myself at a local nature reserve!"

Ruth Dawes; "Many thanks to you and Chris for the two very good sedge courses provided this week. Chris was a very patient and knowledgeable tutor. I really valued this opportunity to learn, revise and relearn the things that it is easy to forget without regular practice. The courses will greatly help me with my voluntary botanical recording both in Shropshire and Montgomeryshire."

Caroline Uff; The BTP has been a really well run project, providing motivation to 'get out there and record wildlife' as well as access to a high standard of training for individuals. From the property (National Trust) point of view it has added an extra dimension to the training that is on offer to our volunteers, in particular in areas that need specialist knowledge. The BTP has offered flexible bespoke training to National Trust volunteers where there is a site / species specific need and this has been well received. Thank you."

Damian Glynn; "The Biodiversity Training Project (BTP) has helped me to improve my plant identification skills from a complete beginner to an intermediate level. I started going to the BTP training courses back in 2008 and have gone every year since then. I found the teaching excellent and would recommend it to anybody. The teachers on the identification courses are experts in their particular areas and helped to simplify using a field guide making it easier for beginners to use. I am doing a teacher training course and my subject is ecology and to teach this subject properly I need good identification skills. The BTP has helped to improve my confidence to teach my students basic woodland survey skills using the National Vegetation Classification (NVC) system, which is part of the BTEC ecology syllabus. Last summer I took out two different groups to teach them how to carry out a woodland survey. During the field trip some of the students asked me what certain plants were, and I was pleased to be able to

tell them what they were and why they grow in certain habitats. I was able to carry out the survey because I had been on many plant identification and survey courses run by the BTP. I have got a lot out of the BTP courses because not only have they helped me professionally to become a better ecology teacher but also given me a deeper appreciation of my surroundings and introduced me to different nature reserves in the county. I intend to carry on developing my identification skills each year and in future I hope to send in records to the county recorder. I hope this project carries on to help people see the importance of protecting and having wildlife sites to visit and enjoy.”

Sue Swindells; “Over the past four years the B.T.P. has taken me to many wonderful and diverse areas of Shropshire from the Stiperstones to Fordhall Farm, Market Drayton, and the Severn Valley Country Park, Bridgnorth to Llanymynech Rocks and many places in between. The tutors on the training days have been extremely knowledgeable, patient and informative and their guidance on getting to grips with keys and which reference books to use were most helpful. I have learnt to look at plants in detail with a hand lens and have seen those 'dentritic' hairs on Great Mullein and the white 'moniliform' hairs on Smooth Sow-thistle plus many more I.D. features. So now I feel I have the confidence and enthusiasm to get out there and record- which I do. It is fun and exciting and I enjoy every moment.

Anonymous; “Good to get some practice on groups you don’t regularly come across and discuss identification with other people”.

Anonymous; “Inspiring, promoted complete change of lifestyle!”

Resources

- A provisional account and atlas of The Craneflies of Shropshire by Peter Boardman
 - Whilst funding for printing costs was raised independently of the BTP, production time and some recording time was undertaken in BTP time. A total of 232 species were listed with maps produced for each along with habitat

information. The resultant publication was the first county crane-fly fauna produced in the United Kingdom.

- Fold Out Chart – Features of the Shropshire Hills: The Stiperstones and Long Mynd. This educational chart illustrating the flora and fauna of this area was produced as a partnership between the BTP, FSC Publications, The National Trust, Natural England and the Shropshire Hills AONB. The BTP project officer chaired publications meetings and edited the text of the report but the BTP had no direct financial input – this was met by the organisations listed above.
- Fold Out Chart – The Meres and Mosses
- The Flora of Loton Deer Park by Mark Duffell. During 2010 a number of evening (or twilight) events were held at Loton Deer Park to record the flora of the site. This was to encourage those volunteers who had been on a number of the botanical training events to put their skills to the test at a local site of botanical importance. A total of 847 records of 280 species of plant were recorded.
- An invertebrate fauna of The Stiperstones area by Peter Boardman. This document was suggested by Tom Wall, who sat on the BTP steering group before retiring from Natural England in 2009. He was keen to see what invertebrates had been recorded upon the National Nature Reserve but also within the wider landscape. The document was put together by the Project Officer during BTP time. The report covered 1294 species of invertebrates.
- CD-ROM of British Beetles by Richard Wright – The BTP contributed £300 towards research costs of a photographic guide to the approximately 70% of the British beetle fauna. The CD-ROM is expected to become available in early 2011.

Biological Records

Obviously one of the main outputs was the number of biological records submitted during the project's tenure however it is particularly difficult to be precise with an assessment. This is due to the fact that the project trained people in the process but did not act as a receiver of records per se – rather encouraging recorders to submit to the wider recording community of county and national recorders. This difficulty was presumably recognised in the project success measures document as an assessment of numbers of biological records was not required as an outcome; however a ball park assessment carried out by the project officer estimated that between 35,000 – 40,000 records were generated by volunteers of the project from 2006-2010.

Major contributors to this total were volunteers Jim and Anne Shaw from Edgmond near Newport. Following advice from the BTP and subsequent training on BTP events Jim and Anne recorded 9483 moths of 393 species during 2007-2010 from their garden. This remarkable haul has increased our knowledge of a very under-recorded area of the county and all data was passed to the county recorder and the garden moth scheme. Jim and Anne also carried out two bird recording transects in their area.

Mark Duffell and fellow volunteers made a total of 1350 records of 322 different species from 74 different species during survey work for the Flora of Loton Deer Park (Duffell, 2010) and a further 1000 records from other sites during events.

The Shropshire Crane-fly Atlas (Boardman, 2007) generated a total of approximately 3500 records (with a subsequent 2000 since) whilst the Invertebrate Fauna of the Stiperstones (Boardman, 2010) generated at least 2000 records.

The Project Officer generated approximately 4000 records during 2010 consisting of moth, butterfly, shield bug, fly and beetle records, with approximately 2000 records during each other project years.

Other major contributions came from Morgan Bowers (Martineau Gardens moth trapping), Alveley Park Moth Group (moth trapping), Dave Evans (botanical records), Ian Cheeseborough (bees and wasps), Don Stenhouse (beetles), Discovery Centre recording project (various), Fordhall Farm project (insects) and a number of recorders with smaller contributions.

Accreditation

The BTP was charged with investigating current accreditation schemes and identifying whether accreditation was a particular issue amongst volunteers in the sector. The report is contained within the Appendix of the document.

Budget

The BTP worked within an agreed budget of £246,090 with the maximum contribution from the HLF of £221,000 – a total of 89.9% contribution. The remaining 10.1% was funded by the FSC. In total 20 quarterly claims were submitted to HLF (via the HLF monitor).

Dissemination Events

Originally the results of the BTP were to be disseminated at an end of project conference to have been held at Preston Montford. Once the project started however it became apparent that a more suitable way of disseminating the results of the project would be to attend other conferences where the opportunity to display posters or deliver talks would reach more people than a conference in Shropshire might.

Conferences / symposiums / events attended were;

- Foundations of Biodiversity: saving the world's non-vertebrates – Zoological Society of London symposium: (London – ZSL) 24th / 25th February 2010. (poster display)
- 10th National Biodiversity Network Conference: Opening opportunities for biodiversity: working with the NBN (London – The Royal Society) 15th October 2010. (poster display)
- Beyond 2010: strategies for understanding and responding to long-term trends in UK biodiversity (London – Natural History Museum) 16th / 17th November 2010. (poster display)
- End of Project celebration event: (Preston Montford) November 21st 2010
- Shropshire Biodiversity Partnership: (Shrewsbury) planned for March 2011.

APPENDIX

1. Accreditation report

Background

An investigation into the accreditation of the biodiversity training project course programme is a requirement of the Heritage Lottery Fund grant that funds 89.9% of the Biodiversity Training Project (BTP) based at Preston Montford Field Centre. The accreditation aspect of the project delivery was scheduled within an *'estimate of milestones'* table that was designed to monitor project outcomes. This table detailed an estimated timetable for various aspects of accreditation for volunteers starting with a review of professional and accreditation provision for volunteers in spring 2007, with an eventual output aim of producing a model for accredited biodiversity training during 2010, the final year of the project. A full accreditation report was detailed to be completed within the *'estimate of milestones'* programme to be delivered during the summer period of 2008, however due to problems finding published data, the extension of the timetable for the scoping review was given to enable continued exploration of sources.

Few reports examining the role of volunteers with biodiversity and natural history have been published and even less has been published examining the role of accreditation as a motivator or factor influencing volunteer effectiveness. In the Lancaster University study (2005) it was estimated that around 100,000 people regularly contribute to the biodiversity process through voluntary status in Britain, and it examined some of the reasons behind why volunteers do what they do. These were varied and ranged from those people just wanting to get away from the stresses of modern life to driven professional taxonomists who volunteer in their spare time to further their own studies. Whilst this document was ground breaking in that it examined these issues it didn't look at the role of accreditation within this process.

More recently the House of Lords Science & Technology Committee on behalf of the UK Biodiversity Research Advisory Group (UKBRAG) touched upon amateur involvement in taxonomy (and its decline) – taken further within some of the submissions to the committee by such organisations as The Royal Entomological Society.

A number of accreditation schemes were investigated during the early stages Biodiversity Training Project and this report is based upon the findings of investigations into the workability of each within the constraints of the Project. Where known all detail relating to financial and other implications are listed relating to the following accreditation providers / schemes. Each option is investigated with firstly a subjective description of what each organisation does and the costs involved, and then a more critical appraisal is raised in terms of the prospect for volunteer involvement, volunteer training or professional prospects and output of biological recording by volunteers;

- National Open College Network (NOCN)
- Lantra
- LEMUR
- IDQ (Identification Qualifications)
- Recording Society accreditation (Bat Conservation Trust, Mammal Society)
- Field Identification Skills Certificate (FISC)
- University programmes

As the Biodiversity Training Project has rolled out training over the past few years, the opportunity has arisen to collect data relating to volunteering and accreditation, and whilst not collected in a scientific way, it is nevertheless a useful marker and worthy of reproduction within this brief report.

A summary table of accreditation schemes is illustrated within the Appendix of this report.

Accreditation bodies - organisations

- **National Open College Network (NOCN)**

The National Open College Network is a major awarding body providing national qualifications and a complementary range of national and local activities, including curriculum development and locally developed accreditation.

Within the range of NOCN qualifications the locally developed accreditation aspect is the only relevant option to the BTP and accreditation options are structured within the lower tiers of related disciplines such as forestry and horticulture, under the environmental conservation heading. To set up an accredited qualification within the NOCN framework has costs that would need to be met by any potential organisation.

Under the 2005-2006 charging structure supplied by NOCN the financial cost of setting up a single year of BTP training would be as follows;

1. Annual Centre Approval Fee – (Band C – based on the average BTP through put in each of the two full years it has operated - £1000)
2. OCN Associate Fee - £2000 pa
3. Charge per learner – from £9 per learner for 1-3 credits (BTP has average 300 learners per year)
4. Access to HE learner registration fee between £80-£100
5. Quality assurance fee - £325 for half day visit to cover two tutor assessments (BTP used 21 tutors during 2008)
6. £15 per certificate for each learner.

In some of the national “off the shelf” qualifications learners can pay directly for credits which look to vary between £30 for a basic entry level qualification to over £100 for a higher level credit.

Given these costs the development of an accredited NOCN training programme through BTP would need significant funding to set up and a set of approved tutors to deliver.

Some OCN courses are locally available that look at different aspects of woodland management and woodland practical skills including coppicing, hedge laying and sustainable woodland management run by the Green Wood Centre. The cost of these varies from £110 per course, rising up to £375 – dependent upon course length. The courses are not focussed upon biological recording but some identification skills of woodland trees and flora are covered in the courses and candidates have to be able to identify a small number of species as part of their assessment. Also wider biodiversity issues are examined – an example is “Name a protected species associated with coppicing and list 2 ways in which you might detect its presence.

(Richard Thomason pers comm.)

- **Lantra**

This organisation works with business to provide training in a variety of land-based environmental training that are mostly structured with businesses and educational establishments. In the original manifestation of this document the information supplied by Lantra following email conversations and phone calls very much suggested a similar approach as the OCN, though perhaps more structured through already recognised educational organisations or an employer, but with similar financial implications for individuals and organisations involved.

More recently however it appears that Lantra have manoeuvred themselves into a slightly different place within the market and during early 2008 produced two research documents examining firstly existing research into volunteer skills as well commissioning a new research document across the volunteer sector in cooperation with 43 volunteer organisations and wider networks. Both documents deal with the conservation sector, though this has been widened to include animal welfare organisations but mostly reviews practical nature conservation activities rather than biological recording ones per se (though within the

document there is a small section that refers to botanical recording as “technical volunteering”). The documents produce information on the age of volunteers, suggesting (from Cabinet Office research published in 2007) that volunteers come in two main age bands, principally the 25 – 34 age band, with the remainder being 45 – 64. To test this finding against my experience of The Project to date I randomly selected 5 of the 2008 courses and split the ages of attendees into 3 categories; 25 – 34, 35 – 44, and 45 – 64 (this was done roughly as we currently don’t collect this data). My findings disagree with the figures quoted in the Lantra document as in each case those in the age range 45 – 64 dominate, with the age range of 35 – 44 coming second. Only 6 people across the 5 randomly selected events fitted into the youngest age category and through my experience of The Project I would say this is similar across the greater range of courses. These figures might well influence the need for accreditation across our volunteers in either a positive or negative way.

In terms of accreditation the Lantra research asked volunteers about their existing qualifications and a significant amount of volunteers (just less than 50%) across the sector were qualified to HNC - degree level or above (though not necessarily in a conservation related subject area), whilst around one in ten had no qualifications at all. Again this high figure of qualified volunteers may influence the need for further qualifications negatively or positively. The relationship between volunteers and the labour market was also examined and that produced some interesting statistics and some that are probably quite unrealistic in terms of achievability. Of those surveyed who were unemployed, 72% stated that they wanted to progress their volunteering into paid employment – perhaps not an unsurprising figure, however the age range of these people were mostly between weighted between 45 and 65+, with 21% of 65+ year olds seeking paid employment in the nature conservation industry. This is perhaps not a realistic goal. Alternatively those under the age of 24 had a common opinion of volunteers as “inferior” and a misconception that volunteering is often viewed by society as community service or a punishment for wrong doing. Though not stated within the report this opinion may relate more to socio-economic background and demographics.

Gender was pretty equally balanced with 46% female volunteers and out of the 315 volunteers asked only one person declared that their ethnicity was of “non-white ethnic origin”. Both these figures tally with my experience of The Project and volunteers of a non-white ethnic origin have only been engaged with when we took events to wider conurbation of the West

Midlands region. The wider FSC has worked with the Black Environment Network (BEN) to encourage people into National Parks, and there maybe potential for the BTP to work with BEN to similarly encourage people to engage with biological recording.

One in ten volunteers stated that they had a disability or health issue which impaired their ability to volunteer – however it should be borne in mind that the organisations poled included such as Riding for Disabled and other organisations who routinely offer pathways for people with disabilities. In my experience our ability to accept people with disabilities is quiet low due to the locations in which we host our events and also the demand. We have however held events with two organisations (Craven Arms Volunteers for the Environment – CAVE, and the Telford Green Gym) who work with people with learning disabilities as bespoke event to suit their needs during 2008, and have worked in the past with the Martineau Project in Birmingham which works along similar lines. We are currently also planning a future programme for 2009 with CAVE to continue this very rewarding work.

An interesting question that was posed to volunteers asked about improvements within their volunteering roles. 45% of those asked were happy with things they were doing with only 18% wishing for more training. Within the Project the responses we generated from similar questioning showed that training had a very high role as one might expect given that training is our primary objective.

Perhaps the most interesting outcome of the volunteer review was in the list of 9 recommendations at the end of the review document. Loosely they are related to the promotion of volunteering across a wider section of society, the value of skills development where it supports the objectives of organisations, more support for volunteers by organisations and across the industry, joined up thinking amongst organisations who use volunteers, dissemination of up to date information across the sector and the promotion of volunteers skills development – but there is no mention or recommendation of accredited qualifications for volunteers which I found surprising given Lantra’s core business role.

- **LEMUR**

The LEMUR Project is a partnership between Herefordshire Nature Trust, Ambios Ltd and Sheffield Wildlife Trust. It offers a bursary (funded by Heritage Lottery Fund – HLF) over a 9

month period for up to 12 placements at a time and offers a combination of on-the-job professional experience and formal training linked to a variety of work areas including species identification, wildlife habitat survey, habitat management, heritage interpretation and generic skills such as project management.

Trainees receive a training allowance equivalent to £172.12 per week plus a “completers” payment subject to agreed achievements at the end of the placement.

Trainees work towards units from Environmental Conservation NVQ Level 3 and Biological Assessment Skills OCN Level 3. The choice of units is dependent upon placement organisation and guided by NVQ Assessors.

Figures quoted on the website suggest at least 80% of attendees find employment in the environmental sector with 6 months of leaving the programme, which suggests that this scheme is very successful at accelerating the learning of placements into a work environment rather than being an accreditation scheme for volunteers.

- **IDQ (Identification Qualifications)**

In the original version of this document I started this paragraph by questioning whether the qualifications (started in 1993) were still available to participants, however new information from Sue Townsend suggests that they are available and have been arranged between the Natural History Museum and organisations such as The Environment Agency for their staff in recent times (Sue Townsend pers. comm.). The latest update on the NHM website advises that training is arranged on an ad-hoc basis dependent upon a number of candidates and the availability of staff. Candidates require a thorough knowledge of their subject and there is a 90% pass mark required for the qualification. The fee involved is around £250 per examination and subject areas cover botanical and invertebrate themes, though with a heavy bias on marine and aquatic subjects. The difficulty levels, the fees and the limited range of subject areas may somewhat deter many volunteers from proceeding with this qualification.

- **Specialist recording society accreditation**

Some specialist recording groups such as The Mammal Society and the Bat Conservation Trust run their own accredited qualifications.

The Mammal Society works with organizations such as the Field Studies Council and other field centres around the UK and offer certificates in a variety of mammal based subject areas. These range from day courses with an attendance certificate (costing around £100), to 3 or 4 day more intensive residential courses costing between £300 and £400. The assumption would be that these longer courses may be aimed at consultancies and individuals working towards specialist licences and applications.

The Bat Conservation Trust similarly runs field based residential courses with the Field Studies Council aimed at three distinct markets – as listed in their brochure. Firstly a set of courses aimed specifically at consultants and those working towards bat licences. These tend to be residential over three days and cost between £300 and £500. Secondly there are a small number of courses aimed at planners, with a few introductory day courses and some residential courses are aimed at volunteers. These cost around £25 for a non-residential day course and up to around £200 for a short residential course.

Both of these organizations seem to provide high quality training aimed at both volunteer recorders and consultants, though at a price. Whilst currently no BTP volunteers have asked for help with funding to attend training run by these organizations – we have helped fund 4 people with FSC courses using the BTP assisted places scheme. For this scheme a volunteer must demonstrate that by attending a course their volunteering and biological recording skills would be sufficiently improved. So far we have applied this scheme to courses on micro-lepidoptera and difficult botanical groups.

- **Field Identification Skills Certificate (FISC)**

The Field Identification Skills Certificate (FISC) was developed as a test of botanical identification skills that determines your botanical skill level on a scale from 1 (beginner) to 7 (expert). The test was developed in 2006 by the Botanical Society of the British Isles (BSBI) in

collaboration with the University of Birmingham and the Field Studies Council, and the first real exams were set in 2007. I sat in on the early test versions of the test and subsequently helped with further days in 2008. The test uses a variety of plant identification techniques including specimens in a lab, and field identification to assess botanical skills and has so far been sat by volunteers and professional botanists. It would seem in 2008 the balance of volunteer versus consultant has changed to favour consultants, which would suggest the qualification is quickly being recognized within the ecology industry as beneficial to show individual botanical skills by consultants or consultancies. Fees for the test are £50. At this price it isn't out of the scope of the volunteer though it is only likely that volunteers who want to show progression in their skills over a period of a number of years would make the investment and sign up for it.

In 2008 a number of botanical Vice County recorders were invited to take the test to try and examine whether the top end of the recording scale would give a context to those lower scales achieved by the majority of amateur botanists and consultants. This is a particularly important landmark as this sort of participation by county recorders was seen as a definite barrier to participation in discussions with other groups, particular the British Dragonfly Society who felt that dragonfly county recorders may take offence. A similar comment was made by Butterfly Conservation who acknowledged that whilst some disincentive to experienced volunteers may occur by the introduction of a Lepidoptera FISC (or similar), the organization is desperate for some form of assessment of the ability of their volunteer recorders and a training programme allied to an accreditation that BC had control or ownership of into the long term.

Comments from the Severn Gorge Countryside Trust (SGCT) via the BTP HLF monitor suggested that SGCT management felt that subjecting their own volunteers to the BSBI FISC may have the result of putting off volunteers and decided against sitting the qualification. The bone of contention within this view is that the difficulty factor of the subject area – and the low ranging marks that anyone not of what might be called “an average botanical ability” would achieve a low ranking within the 1-7 scale. This can be seen from two distinct perspectives. Firstly the view of a botanical County Recorder may be that anyone with a score of less than 2

may be very limited in the quality of records they are submitting. The alternative perspective is from the beginner who may not even be aware that there are more than one species of stinging nettle or bramble and may soon be put off by the complexity within this subject. The difficulty arises in “dumbing down” a complex subject and I am pretty convinced that this would be a retrograde step; however this must be weighted against the need to encourage beginners to progress.

I would conclude that the FISC or potential FISC-type qualification developed by recording societies and groups are best suited for active recorders who seriously take part in biological recording and are likely to do so for some time with a view to increasing their own abilities through training as either a volunteer recorder or a consultant. The ultimate value of FISC or a FISC-type scheme is the fundamental need of recording societies to validate records by recorders. To do so effectively may require some form of official discourse with the National Biodiversity Network (NBN) and recording societies with an overall organization capable of bringing some standardization to the process.

- **University Programmes**

Over the last few years the Universities have begun to offer a range of Masters Courses and these seem to have mushroomed dramatically. For example in the latest British Wildlife magazine (August 2008) no less than 9 Universities and other educational establishments, are advertising courses that cover field skills, biodiversity survey, conservation and field biology, and biological recording.

Birmingham University was the first and foremost institution to offer a Masters covering all aspects of Biological Recording and I should at this point register my own participation as first a student and more recently as a tutor on this programme. From my own experience of it most of the people who sign up to do the course do so for career-related reasons, though not all. I doubt figures exist however I would be fairly confident to predict that a fair number of people sitting the Birmingham University qualification also do a significant amount of volunteer recording too. Given my route through the Birmingham University programme, ultimately leading to this post as Project Officer I cannot comment further on this institution.

Biodiversity Training Project Volunteers and Accreditation

As the BTP has progressed we have made a point of regularly asking our volunteers to submit information to better inform us as to their reasons for volunteering and whether accreditation is valuable to them.

At our launch in 2007 attendees were asked a range of questions including whether accreditation was important to them and the result was that 33% said that it was. Of these people there was a fairly even split between those who would consider accreditation over a day course, a slightly longer course, or a longer set of courses. Volunteers represented 22 different organisations and gave a wide range of answers as to why they volunteered (broadly in line with the findings within the Lantra document). Further to this volunteers who attended our 2008 event were asked the same question again, as it was felt the first time the question was asked the people who responded were not necessarily those who attended our courses. It was felt therefore that a repeat question in 2008 would target those who had regularly attended our courses enabling a more true response of the opinions of proven committed volunteers. This showed a rise from 33% to 43%, but still a minority of volunteers favoured accreditation. This may reflect the age range of the volunteers who come out on BTP events as detailed in the Lantra section of this report; however 43% is still a significant slice of people who are interested. A further factor that may influence this minority accreditation statistic maybe that some of the people questioned may already be within the paid sector but attending our courses as volunteers. Several of our regular volunteers are known to be employed by organisations and consultancies and yet volunteer for other organisations within the industry or even their own organisation, in their spare time. Perhaps the natural history industry is unique in this respect.

To my knowledge two BTP volunteers took the BSBI FISC during 2008. From very brief informal interviews with them sometime after the qualification was sat. Volunteer A found it particularly useful to assess his own skills and stated his keenness to re-sit the qualification in

a year's time to see his progress. This individual is very motivated and had already been identified as someone who would likely make the leap from volunteer to tutor in the future. Volunteer B found the day quite daunting as a beginner but communicated to me that the process had inspired him to continue within botany and to re-take the FISC in two years time. He had on the day been a little tripped up by his familiarity with one particular habitat, and given the timing within the year of the test, and the variety of plants from other habitats that the one he had studied – he felt that he did the best he could with the knowledge he had to date obtained. It was encouraging to hear that this potential disappointment has not quashed his passion and interest in this subject – but as noted earlier – this may not always be the case.

In summary there is clearly a lack of accreditation opportunities for those that want them available to the volunteer biological recording sector, particularly on an ad-hoc basis that are affordable and enable progression as skills are developed. Ultimately the fundamental barrier to participation that prevents those willing to become part of a volunteer accreditation programme is the costs involved to individuals and organisations.

Appendix 1 – Summary table of accreditation schemes

Name of Scheme / Awarding Body	Is there training ?	Affordability for volunteers / training organisations	Applicability for volunteers	Available to volunteers within the BTP area
National Open College Network (NOCN)	yes	Expensive to set up by an organisation and relies on funding. Costs vary to volunteers depending upon course length.	Applicable once set up, but chiefly for those looking to progress their career.	yes – courses associated with woodland management at Ironbridge
Lantra	yes	Expensive to set up by an organisation and relies on funding. Costs vary to volunteers depending upon course length.	Applicable once set up, but chiefly for those looking to progress their career.	no – the most relevant courses that have Lantra accreditation are over 50 miles away.
IDQ (Natural History Museum)	no	Expensive and organised on an ad-hoc basis	Generally for experienced specialists / consultants	no
Recording Societies Bat Conservation & Mammal Society	yes	Range of accredited courses, some aimed at volunteers. Prices vary but some are affordable for volunteers, some aimed at ecologists and planners.	Applicable for volunteers in a range of specialist subjects that often link in to legal	yes – Preston Montford hosts some of the events for both societies

			requirements related to licences etc.	
FISC (BSBI)	no	Most affordable option of all examined.	FISC is designed to give a true assessment of ability so applicable within volunteering / record verification	yes – Preston Montford
University Programmes	yes	Expensive range of courses of 2/3 years	Mostly aimed at career progression	yes – University of Birmingham use Preston Montford and the Gateway in Shrewsbury. Also Walford College carry out conservation courses.

References

English Nature, Lancaster University & Natural History Museum (2005): Nature; Who Knows? Amateurs as Experts. (available at <http://www.lancs.ac.uk/fss/projects/ieppp/amateurs/dissemination.htm>)

Lantra (2008): Volunteers Skills Research Review of Existing Research and Volunteer Skills Research (both available at <http://www.lantra.co.uk/businesses/volunteer-research/>)

UK Biodiversity Research Advisory Group (2008): The State of Systematics and Taxonomy in the UK – a submission to the House of Lords Science and Technology Committee (available at <http://www.publications.parliament.uk/cgi-bin/search.pl>)