

Changing Minds

The lasting impact of school trips

A study of the long-term impact of sustained relationships between schools and the National Trust via the Guardianship scheme

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1. Executive Summary

Introduction

In recent years the importance of learning in the 'real' environment, outside the classroom, has had widespread attention. Groups such as the Real World Learning Campaign have drawn attention to the dangers arising from the decline in field study work. Many children are taken to school by car, and parents fear allowing their children even to play in parks close to home, tacitly encouraging them to play indoors, leaving fewer opportunities for outdoor social play or experience of the world outside their front door.

The National Trust's Guardianship Scheme addresses the negative consequences of such trends. It offers the opportunity of:

- a wide range of practical activities that support the National Curriculum
- getting involved first hand in worthwhile practical conservation projects
- exploring and connecting with their local environment
- making full use of the local National Trust site and resources
- building awareness of, interest in, and responsibility for the natural environment.

Guardianship differs from many out-of-classroom learning experiences. By focusing on multiple visits to a single site, it develops an on-going partnership that not only supports curriculum work, but also provides stimulating, practical experience of the great outdoors and conservation work. The Scheme is now well established across the country in over 100 primary and secondary schools.

Evaluations of traditional out of classroom learning have identified the capacity of partnerships to develop positive attitudes, arouse learners' interest and improve behaviour. The unique nature of the Guardianship Scheme allows this study to go further. Based on in-depth interviews with students past and present, teachers and Trust wardens, it looks at the longer-term impact of out of classroom learning experiences on knowledge, attitudes, behaviour, and decisions and choices young people make.

Research objectives

Research objectives for the study are summarised as:

- Compile evidence from, research and document the tangible benefits of Guardianships with respect to the following categories of people: pupils and ex-pupils, teachers, the wider 'communities' involved, National Trust staff, National Trust volunteers, and the National Trust as an organisation
- Explore the learning outcomes of the visit(s) for the individuals involved
- Investigate what the individuals' perceptions were about whether the experience has changed their lives in any way. For example, did the experience lead to a developing interest / influence a career path / inform a lifestyle choice?
- Explore, where possible, the impacts on a community where a relationship has been particularly strong.

The properties chosen reflected a range of schemes in relation to the following criteria:

- Long-term involvement with a particular school or small group of schools
- Continuity of involvement of wardens with school partnerships
- A range of contexts (e.g. country, coastal, urban)
- A range of kinds of work undertaken by schools (e.g. conservation, research, field study, gardening).

Benefits of the Guardianship scheme to pupils and schools

- The virtually unanimous view amongst students was that Guardianship work was fun, exciting, enjoyable and better than working in the classroom
- Attitudes to the environment both in terms of a desire to protect the local environment and also in attitudes to issues such as recycling and avoiding waste
- Resentment at visitors and tourists who did not treat 'their' environment with respect
- Development of social skills such as tolerance, caring, group awareness and self-discipline
- Research skills involving understanding and management of the natural environment
- Skills ranging from gardening and cooking to using digital cameras and microscopes
- Schools saw great benefits from having a 'classroom in the park' and Headteachers reported a development of 'community spirit' and valuing what was 'in their own back yard' as a result of the scheme
- Several schools saw the Guardianship Scheme as the best way of matching the guidelines of the Qualifications Curriculum Authority to the needs of their children
- A special needs school was reviewing its curriculum for Special Educational Needs pupils as a consequence of their involvement with the Guardianship scheme.

Benefits of the Guardianship scheme to families, friends and the community

- A consequence of the continuing involvement was the increased willingness of parents to come into school for events and meetings
- Guardianship partnerships have the potential to make a meaningful contribution to teacher training through visits or short-term placements
- Pupils and teachers agreed that parents and siblings visited National Trust sites more frequently as a consequence of the awareness-raising by their primary age children
- A minority of partnerships are taking full advantage of opportunities on-site to publicise the Guardianship work. This has the potential side effect of impacting positively on the image of the National Trust.

Benefits of the Guardianship scheme to staff and volunteers at National Trust properties

- Both current pupils and former students praised the wardens they had worked with. In rural locations and small communities former pupils often kept contact with wardens. This was a key factor in the decision by some former pupils to work at a National Trust site
- Wardens reported increased confidence in dealing with children and in providing a stimulating learning environment. Wardens are aware that they are not teachers and they are less confident in dealing with secondary school children. A move to sustain and extend the Guardianship Scheme across the school transition would require training.

Areas where impact is less apparent

- Students' learning less apparent in the study included a failure to apply local issues to national and global matters. For example, whilst students could talk at length about the pros and cons of wind power in their area, they did not seem to have taken this further to think about the implications for the wider shift from fossil fuels to renewables in relation to global climate change
- The impact on subject choice at GCSE was not seen by students as significant, and was therefore difficult to ascertain, though teachers were far more convinced that the Guardianship experience did make a difference to their subject choices.

Key factors in successful schemes

- Guardianship is most successful in small, compact, rural communities, especially those where both Warden and Headteacher live locally
- The most effective schemes offer children early and sustained engagement with the property
- It is important to promote a wide range of learning objectives including social and practical skills, attitudes and behavioural change in the scheme objectives
- Schemes should concentrate on the uniqueness of the property and develop a positive strategy for parental and wider community involvement.
- Guardianship partnerships benefit from embedding good practice through clear lines of communication with relevant members of staff in other area and regions
- Good liaison procedures between primary and secondary schools are vital to making the most of students learning benefits.

Future areas for improvement of the Guardianship Scheme

For the Guardianship as a whole to have even greater impact on participating pupils and schools, it would be necessary to:

- Establish continuity within the Guardianship Scheme between primary and secondary schools
- Consider the development of medium and long-term plans for successful schemes, through wardens, teachers, and Trust learning staff
- Encourage schools to devote more time to follow-up work that extends the focus of children's learning from the powerful local experiences of the scheme to the bigger, global issues and concepts that they represent
- Produce interpretation information for the sites where children work, to explain how the GS operates
- Invest in the continued training of wardens for the Guardianship Scheme, including through strengthening links with ITE institutions
- Draw on the expertise of successful schemes to publicise and develop effective strategies for community and parental involvement
- Improve internal lines of communication and decision-making through dialogue with wardens.

2. Introduction to the Guardianship Scheme

2.1 Education outside the classroom: the current debate

There is no question that, in recent years, the importance of learning in the 'real' environment, outside the classroom, has become more widely apparent as well as more extensively researched. Substantial reviews and studies have pointed to this (e.g. Rickinson, 2001; Fien et al., 2001; Dillon et al., 2005): at the same time, there has been a rapid growth in provision for children to learn outside school, at interactive science centres, museums, environmental centres, adventure centres, wildlife trusts, and a range of other venues. Many of these initiatives have had highly positive evaluations of their work, whilst at the same time pointing out the risks posed by inadequate planning, preparation and follow-up, as well as the dangers of what has been called the 'trip mentality' or 'edutainment' and the concomitant importance of the role of centre staff (Peacock 2002). The importance of making links between school learning and the 'real' environment has been emphasised internationally by writers such as Capra (2002), Hicks (2002) and a number of Australian researchers who have emphasised the importance of moving towards learner-centred environmental work, and away from too great a reliance on school-based tasks (Griffin and Symington, 1997; Rennie and McClafferty, 1996). Very recently, an extensive study by the Wellcome Trust concludes that to be effective, primary children's science learning requires their work to be made more relevant to their everyday lives, and that more creative contexts for learning are needed, to enable children to take on fresh perspectives (Wellcome Trust 2005).

Some agencies keen to promote outdoor learning have gradually come together in order to make greater impact; for example the Real World Learning Campaign, an alliance of the National Trust, RSPB and Field Studies Council, who have consistently reminded schools of the dangers arising from the decline in field study work consequent on curriculum, assessment and political pressures (Fisher 2001, Tilling, 2005). Other agencies are coming together in similar ways: 'Natural England', to be established in 2007, will bring together English Nature, parts of the Countryside Agency and most of DEFRA's Rural Development Service, to serve 'People, Places and Nature'. The Soil Association has also funded successful workshops in schools and at Organic Farms in several regions of the country, with similar objectives (Peacock, 2005). Some authors have gone as far as to ask the question, 'what [environmental] learning do children miss by going to school?' (Vare, 1998).

In the final report of their recent study, the team of researchers from King's College, the NFER and University of Bath conclude that;

'...there is a need for a better understanding of how students learn in the outdoor classroom. Teachers and other outdoor educators should consistently aid students to understand how what they experience in the outdoor classroom connects to, extends, and reinforces their in-school work... There is much scope to raise teachers' awareness and understanding of the range of outdoor learning sites and what outdoor education opportunities they offer'. (Dillon et al., 2005).

All evaluations emphasise the capacity of out-of-classroom learning to develop positive attitudes, arouse learners' interest and improve behaviour. The impact on cognitive development- the learning of new facts, ideas and concepts- is however seen as more problematic. And whilst there have been occasional long-term studies of specific contexts such as museums (e.g. Stevenson 1991), few studies have been able to look at the

longer-term impact of a wide range of outdoor learning experiences on knowledge, attitudes, behaviour and most importantly, decisions and choices young people make. Hence the importance of this study of the Guardianship Scheme.

2.2 Reasons for current evaluation

Context

The National Trust welcomes an estimated 50 million visitors to its properties each year, coming as individuals, in families, in school groups and in other groups. Longer-term relationships with some of these groups have been developed to encourage regular contact, dialogue and two-way relationships. The NT believes that it is through these long-term relationships that many life-changing opportunities have been brought about.

In the context of schooling, learning outside the classroom is a powerful and creative antidote to the target driven and academic focus of much school work, and can encourage individuals to develop a sense of ownership and responsibility for our environment. In a recent survey, 9 out of 10 teachers said they do not take as many school trips as they need to because of budget constraints, curriculum timetabling and safety concerns. Implicit in this is the assumption that school trips are a good thing, but without more hard evidence, it is difficult to argue for further support, from Government or private funders, for structured programmes.

Background

It is part of the National Trust Learning Vision Action Plan to undertake an ongoing programme of research and evaluation, looking at a wide range of different learning activities offered across Trust properties. The general aims of this programme are:

- To drive improvements in Learning programmes and projects
- To provide tools to enable us to offer consistently high standards across all learning opportunities in the Trust
- To understand the effect of the learning on the individuals and communities involved and to promote these to the public, opinion formers and our members
- To enable a focus on those activities and projects which use available resources efficiently and which maximise their outputs, outcomes and impacts
- To share lessons learned between projects, in support of the Trust's aim of placing learning at the heart of the organisation
- To complement the internal learning audit and support the drafting of property and regional learning plans, now and in the future
- To support funding bids so that the Trust can continue to offer quality programmes.

Research Objectives

The overall purpose of this research is to raise awareness and understanding of the benefits of out-of-classroom learning so that we can attract the right support to improve the quality and standard of our schools' programmes and provide opportunities for as many children as possible.

There are a number of specific factors that contributed to the conception, development and completion of this research project:

- The 2004 Guardianship evaluation investigated the value of the scheme to current participants and recommended courses of action to improve current practice and procedures (see summary to follow). This evaluation was not designed to determine what long term effects participation in the scheme brought about
- After consulting with colleagues in other organisations, it seemed that this type of evidence is very hard to find, mainly due to difficulties in maintaining or accessing contact with participants
- The Guardianship scheme is the ideal subject for this kind of research – with many well documented long term relationships between National Trust and school staff, over many years, usually in fairly close-knit communities where contact with ex-pupils was easier to maintain or make.

2.3 Aims of the Guardianship scheme

The aims of running a Guardianship are to:

- Develop mutually beneficial links between a National Trust property and a local (usually) primary school
- Deliver a programme of educational sessions, linked to the curriculum, based around conservation, environmental issues (nature / energy / waste / travel) and sustainable living / consumption (how we behave and our impact on the planet)
- Promote practical hands-on involvement by pupils and helpers, guided by a National Trust member of staff who is usually not an education specialist
- Develop and grow over several years with the same school, involving the same pupils on a regular basis
- By virtue of the Guardianship activities – encourage a sense of care about the environment and “ownership” of the property in the Guardianship participants, AND develop a stronger sense of community involvement and integration for NT staff and the property as a whole.

2.4 Background to the Scheme - longevity, scale and scope

The Guardianship scheme has been running since 1989, with some “unofficial” partnerships having been in existence for much longer – one, for some 30 years. There are currently over 100 running in England and Wales, based mainly at countryside and coastal properties. The scheme includes many varied programmes of educational sessions, linked to the National Curriculum, based around conservation, the environment and environmental issues (e.g. recycling, travel etc). School involvement in Guardianships varies from scheme to scheme. Some schools visit with one “Guardianship” class, time after time, whilst for others, every class will visit throughout the year with a ‘lead’ class who may come more often.

2.5 Outline of results from the 2004 Guardianship evaluation

This earlier evaluation of the Guardianship scheme (GS) focussed on a representative sample of five schemes around the country (Peacock, 2004) and came to the following main conclusions.

The scheme was valued by all participants, particularly school staff and pupils. Partnerships that worked best were characterised by continuity of involvement between individual wardens and successive generations of pupils. Excellent and very varied work was being done by children of all ages, in areas such as science, geography, art and literacy (especially oracy). The commitment of NT wardens was highly valued by school staff. Children felt a sense of ownership and responsibility in relation to 'their' site, and there were clear signs that community perceptions of the Trust were being positively influenced. There was a high level of awareness of health and safety issues; the scheme as currently operated costs very little, in terms of expenditure at any given property, and therefore provides a good value-added service.

The perceived weaknesses were the sense of distance felt by some wardens from the central management of the GS. This sense of isolation was emphasised in many cases by their geographic remoteness: some are difficult to contact by e-mail or mobile phone. The materials produced for schools were not always targeted at a specific audience, and could benefit from greater differentiation. In schools, follow-up was often constrained by timetabling and assessment pressures, especially in the summer term. There was also a demand from wardens for training in their education role, particularly in relation to curriculum links, joint planning and ways of working with younger children. There could therefore be value in taking more advantage of support from initial teacher education (ITE) institutions, a process initiated partly as a consequence of the report (Peacock and Bowker, 2004).

The main threats to the future success of the scheme were thought to come from a potential failure to build in progression; factors such as warden overload; schools allowing the GS work to be marginalized as a consequence of assessment/inspection pressures; or a growing sense of isolation from the scheme across the rest of the country. Although training for wardens was seen as important, it was also felt that it would be dangerous to try to change wardens into teachers.

3. Approach to Research

3.1 Specific Research objectives

The Trust's Research Objectives in establishing this study were as follows:

- Identify individuals who previously had a learning experience via a Guardianship school visit to a National Trust property, perhaps 5-15 years ago
- Gather sufficient 'generic' information about the individuals such as age, gender, ethnicity, urban/rural background and (where relevant) age at leaving school, to enable a fuller understanding of benefit accrued
- Record the nature of their experience. Generically, this will be through property or school records, or through asking NT staff, teachers and/or the participants
- Explore what the learning outcomes of the visit(s) were for the individuals involved. Categorise these outcomes using the Generic Learning Outcomes from MLA's '*Inspiring Learning for All*' framework
- Investigate what the individuals' perceptions were about whether the experience has changed their lives in any way. For example, did the experience lead to a developing interest / influence a career path / inform a lifestyle choice?
- Explore, where possible, the impacts on a community where a relationship has been particularly strong, and/or where the community is small. Did the experience encourage the participants to visit similar places with friends or relatives? Did any activity happen as a result, locally?
- Compare the different findings – are some types of experience at a property better for producing "life changing experiences" than others? What can we draw out as the "secrets" to successful running of a Guardianship with respect to producing life-changing experiences?
- Compile evidence from, and research and document the tangible benefits of Guardianships with respect to the following categories of people: pupils and ex-pupils, teachers, the wider "communities" involved, NT staff, NT volunteers, and the National Trust as an organisation
- Collect suitable information (and permissions) from the people contacted to enable future contact to be made. This is especially for use in press stories, or possibly to follow up on the stories for the purposes of future research.

3.2 Evaluation Methodology

The properties chosen for this research reflected a range of schemes in relation to the following criteria:

- Long-term involvement with a particular school or small group of schools
- Continuity of involvement of wardens with school partnerships
- A range of contexts (e.g. country, coastal, urban)
- A range of kinds of work undertaken by schools (e.g. conservation, research, field study, gardening)
- Previous independent testimony (reports, articles, news items) to good practice at the site.

It took over 8 months to identify and complete interviews at 8 GS sites, from the 12 sites initially identified with NT staff. Working at long distances necessitated organising interviews with three separate groups- existing GS schools, follow-up (F/U) students and

NT staffs- on or around the same date, to minimise travel and subsistence. In some cases, this proved impossible to organise, either through unavailability of personnel or failure of F/U schools to respond. Three of the schemes that initially agreed to take part had therefore to be dropped for these reasons.

I also attempted to identify former pupils via inserts in local newspapers in two areas (Worksop and Somerset) but this proved fruitless. Only one non-primary school (Abbey Special School, Farnham) was involved, as very few high schools participate in the scheme. Studland was not used because I felt that I already had sufficient information from the earlier study, and from ongoing contact with the warden involved, who I had encouraged to publish an article about their current scheme (Gadstone & Kemp, 2004).

A major constraint was the difficulty in obtaining responses from F/U schools. As none of these were involved in the GS, Heads did not know the names of pupils required, and could not therefore be expected to see the evaluation as high priority within their extremely busy schedule. My strategy was to write initially, explaining the purpose, enclosing the covering letter from Ann Nicol (see appendix 8.4); to follow this with an e-mail reminder; and subsequently to telephone. In even the best cases, setting up interviews took at least a month, and in some cases, several months. The apparent bias in the study towards properties in the south-west was not a consequence of my location in Exeter; the key factor was the willingness of wardens and schools in this region to be far more co-operative in helping set up visits.

I also interviewed the NT wardens involved with the GS at most sites: where this was not done, it was due to their unavailability on the day of the visit, and the impracticality of making a second visit. The interviews actually carried out are summarised in table 1 below.

3.3 Data gathering approach

Teachers and NT wardens were interviewed individually: in most cases, the list of questions (see appendix 8.3b) was sent in advance of the arranged interview, which in most cases lasted around 45-60 minutes. The interviews focused on biodata; recollections of how the scheme had operated; obtaining any documentation existing about past and current schemes; photographic or display evidence (most of which could not be removed from the school, as it was either on walls or in expensively-produced portfolios to show to visitors); and crucially, perceptions of the impact on attitudes, skills, knowledge and behaviour of the pupils involved. Some teachers and wardens were also able to provide key individual contacts with former pupils involved in GS- related activity; this was particularly important as heads often said they were not officially able to provide information about former pupils, consequent on data protection legislation, and therefore tracking down pupils who had left school was difficult by any other means.

In half of the schools involved, I also interviewed groups of current pupils, largely because the schools had arranged this and I did not want to disappoint them. It also proved helpful, however, in gaining an idea of the extent to which schemes had developed over time.

Table 1: interviews carried out with various participants

<i>Property</i>	<i>School</i>	<i>Wardens and other NT staff</i>	<i>School staff</i>	<i>Pupils currently involved</i>	<i>F/U staff (e.g. in high school)</i>	<i>F/U students</i>	<i>Total personnel interviewed</i>
Barrington Court (Somerset)	St. Mary & St. Peter First ¹	Peter	teacher	8	-	Y5 x 5 Y6 x 3 Y7 x 7	25
Clumber Park (Notts.)	Worksop Priory PS	-	H/T	-	-	Y9 x 5 Y10 x 4	10
Duckpool & Sandymouth (N. Cornwall)	Kilkhampton PS	Mike	H/T	6	1	Y10 x 7	16
Lydford Gorge (West Devon)	Lydford PS	Adrian	H/T	-	-	Y7 x 1 Y8 x 2 Y9 x 1 Y10 x 1 Y11 x 1 Y13 x 1	9
Plymbridge Woods (Plymouth)	Leigham PS	-	teacher	5	1	Y8 x 4	11
Watersmeet & West Exmoor (N. Devon)	Lynton PS ²	Julian	teacher	12	-	3 ³	17
Windermere & Troutbeck (Cumbria)	Ambleside PS	Gareth	H/T	-	1	Y7 x 4 Y8 x 2 Y9 x 2 Y10 x 1	12
Witley Centre, Frensham (Surrey)	Abbey School ⁴	Tony	teacher	-	1	5 ⁵	8
Totals involved	8	6	8	31	4	59	108

The F/U students were interviewed in groups. In some cases, (usually after the end of the school day) these interviews were recorded on minidisk: where this was not possible (usually because of the group size and/or background noise conditions- in one case, a JCB was digging up the playground outside the interview room!) detailed notes were taken. The schedule used for interviews with pupils focused on background biodata, positive and negative recollections of their involvement with the GS, subsequent involvement in related activity, attitude change, and knowledge of current environmental issues (see appendix 8.3a). In two cases, primary school headteachers took it on themselves to contact former GS students and invite them back to their primary school for the group interview: this was perhaps the optimum situation, but was not offered by heads in most contexts.

¹ As the school involved is a first school, the follow-up pupils were in middle school (yrs 4-7)

² school staff and pupils interviewed and observed as part of previous evaluation. Warden re-interviewed

³ 3 School leavers aged 17-19 interviewed

⁴ An all-age special school

⁵ I identified 5 former students now doing land-based courses at Merrist Wood agricultural college, but have so far not been able to arrange access to students or staff.

3.4 Data analysis

The data emerging from this evaluation is essentially qualitative, as a consequence of the nature of the research questions and the Trust's priorities. Recordings were therefore not transcribed in full; instead, they were listened to repeatedly, and key points relevant to questions (often as quotations) were transcribed. Comparison across all interviews for each category of respondent and each question were then compared; a summary was recorded, and illustrative quotes identified. Where quantitative data is relevant and available, this is summarised in tables.

3.5 Difficulties encountered in carrying out LTI studies

Many of the logistical and operational difficulties in identifying interviewees and arranging visits have been identified above. In addition, many of the F/U interviewees had considerable difficulty, initially, in recalling the details of their involvement with schemes, even at a time-distance of only two or three years. I was sometimes offered contacts with colleges or employers of individual 16+ F/U students who had left school, but despite several attempts, I was only able to elicit a useful response in one case, which certainly provided testimony to their ongoing work and progress in environmentally-related study.

A further difficulty throughout this study has been with the notion of 'tangible' or quantifiable change. Impact in terms of career choices, even subject choices, is extremely difficult to pin down; students themselves often do not really know why they made such choices. And despite having positive anecdotal evidence from a small number of F/U students, it is impossible to estimate the extent to which these may be representative of the population involved in GS as a whole.

3.6 The property schemes evaluated in this study.

a) Barrington Court, Somerset, with St. Mary & St. Peter First School, Barrington⁶.

Barrington Court is a large estate near Ilminster, Somerset, which apart from the house itself has formal gardens, an arboretum and an extensive kitchen garden that produces food used in the restaurant. The link with the first school has focused for many years on the kitchen garden. Children visit fortnightly in small groups (half a class) to work alongside the gardener on seasonal work of many kinds, including planting, weeding, harvesting and cooking the fruit and vegetables. The focus is also on skill development, teamwork, responsibility for effective use of tools, and the development of language, including specialist terminology. The children from two small village schools have developed an extremely valuable link with the gardeners involved.

The F/U children interviewed were former Barrington children who had moved on to Swanmead Middle School in Ilminster, now aged 10-13.

b) Clumber Park, Nottinghamshire, with Worksop Priory primary school.

Clumber Park is also a large estate with lakeside walks, the longest avenue of lime trees in Europe, a Gothic chapel and kitchen garden. Priory school is about one mile from the park.

⁶ The link is also with children from Ilton First School, but these were not part of the evaluation study.

The headteacher and NT warden have had a very long-standing link which focuses largely on environmental work in the park and grounds. Unlike Barrington, however, Priory is a medium-large urban primary school with an intake of children from a former coal mining community whose colliery is now closed; hence the area suffers high rates of unemployment.

The F/U students interviewed had all moved on to Portland High School, Worksop, and were now aged 14-15.

c) Duckpool and Sandymouth, North Cornwall, with Kilkhampton primary school

This is a coastal property consisting of two adjacent coves north of Bude, a short distance from Kilkhampton village. The coves offer a range of habitats and landscape, including rocks and rockpools, sand and shingle beach, freshwater pools, cliffs, woodland dunes and heathland. The NT wardens are based at Stowe Barton Farm, between the school and the coast. The children are involved in a wide range of activities with the wardens, including photography, geology, art, willow weaving, and historical work around the earthworks at Kilkhampton castle. Kilkhampton primary school is a medium sized village school in new buildings. The head and the wardens have worked out a detailed annual programme of events linked to the school curriculum (Adams, 2006).

The F/U students interviewed had all moved on to Budehaven Community College, Bude, and were now aged 14-16.

d) Lydford Gorge, West Devon, with Lydford primary school.

Lydford Gorge, famous for the Devil's Cauldron, a deep torrent-fed pool in a narrow ravine, is on the river Lydd, a tributary of the Tamar, on the western edge of Dartmoor. The programme varies from year to year, but tends to focus on flora and fauna, especially birds of prey, foxes, badgers, etc; and on camouflage, forestry, setting bird and dormouse boxes and storytelling. The programme is planned for 7-8 visits per year, of which one or two have normally to be cancelled because of bad weather. Lydford is a small village primary school that has been involved with the trust for several years.

The F/U students interviewed had moved on to either Tavistock College or Okehampton Technology College, and were aged from 11-17. One former GS student also works in the NT café at the site.

e) Plymbridge Woods, Plymouth, with Leigham primary school.

Plymbridge woods is a small riverside and woodland site on the northern outskirts of Plymouth. The scheme focuses on a wide range of activities to enrich the experiences of predominantly urban children, including work on habitats and life cycles, flowers and seed dispersal, stewardship of 'common ground', path clearing, litter picking, installing bird and bat boxes, river work and art. Children spend whole days on site, which despite being close to their homes, has not often been visited by most of them prior to starting the GS. Leigham primary school is a moderately large school on a large housing estate on a hill overlooking the city and port of Plymouth, an area which experiences many of the social problems such as unemployment, vandalism, drug-related crime and single parent families, associated with inner-city communities. The work is carried out with NT wardens and volunteers.

The F/U students formerly involved had gone on to a number of secondary schools, including Devonport High Schools (Boys and Girls); with some to Coombe Dean,

Eggbuckland and Estover Community Colleges. The group interviewed were all boys aged 12-13, at Devonport High School for Boys.

f) Watersmeet & West Exmoor (North Devon) with Lynton primary school.

This is an extensive property incorporating tracts of Exmoor, the valleys of the East and West Lyn rivers, and a section of the coast around Woody Bay. The NT wardens have bases at Watersmeet and at Hunter's Inn, by the coast. It is the only GS scheme that is part of this evaluation as well as the earlier study, hence evidence has been drawn from both studies. The work with children involves a wide range of activity in varied habitats, including woodland, river and moorland, as well as coastal rockpools. The wardens involved have had a long-term relationship with Lynton school; one has been a parent and governor. Lynton primary school⁷ is a medium-sized school serving Lynton village, which has seen an increase in 'incomer' families in recent years, though many children belong to families that have been settled in north Devon for generations. The NT scheme also involves Parracombe primary school in a neighbouring village, though this school was not involved in the evaluation.

The F/U students interviewed were aged 17-19, had all left school and were working locally or about to go on to higher education. One worked as a chef in the NT café at Watersmeet.

g) Windermere and Troutbeck, Cumbria, with Ambleside primary school.

This is another extensive and very varied property, involving a GS scheme that has lasted almost 10 years. Unusually, the warden involved is the (full-time) community education officer, who has developed a progressive programme of activities ranging from nursery age children through to Year 6 (see table 6 below). The programme includes work on sensory experiences, growing and planting, habitats, studies of woodland, meadows and streams, development of school grounds, and 'mini-beasts', leading to an understanding of the children's sense of place. Ambleside primary school is a medium sized urban school with, as in most GS schools, a head highly committed to this work, and ample evidence of it around the school. The F/U students interviewed were all at the Lakes School, a comprehensive community college on the edge of Lake Windermere, and were aged 11-15.

h) The Witley Centre, Frensham (Surrey), with the Abbey School, Farnham.

Frensham Ponds, the site of the Guardianship work in this scheme, is a few miles from the school, and consists of two lakes, woodland and facilities for visitors. Students have been engaged in a variety of stewardship work, including making furniture from local timber, work on reed-beds, map work, mural painting and generally keeping the site monitored and well maintained. Students visit in groups of about 10, and are from the Abbey School, a special school for pupils with learning difficulties, 20% of whom also have autistic spectrum disorders.

I interviewed two staff and a small group of current students over lunch. I was told of 5 former students that had gone on to Merrist Wood College in Guildford, to study Land-based industries, and was able to obtain information on the progress of two of these (see case study 2 below).

The GS scheme at Lynton primary school is described in detail in the earlier evaluation (Peacock 2004)

4. Assessment of Impact and Wider Benefits

4.1 Follow Up students' perceptions of long-term impact

4.1.1 F/U Students: Impact on attitudes

High school students, as teenagers, found it difficult at first to recall and talk about their experiences and learning, a consequence perhaps of the interview situation, where they were expected to talk about their feelings as a group with an outsider. But eventually their conversations demonstrated, in every one of the contexts, that the scheme has impacted on their attitudes to their environment, in a range of positive ways.

The most striking observation was their continuing concern to protect the local environment visited. In many areas pupils had become proud of their locality, and expressed resentment at visitors and tourists, who did not treat 'their' environment with respect. Most students also mentioned their changed attitudes to recycling and avoiding waste, whilst being very aware of the difficulties in communities with limited access to public transport and shopping dominated by distant supermarkets.

'it opens your eyes, makes us appreciate where we live...we take pride in our local area' (17 year-old girl, Lynton)

'It has made me realise what things could be like, if all places were kept clean and looked after, like this' (14 year-old boy, Worksop)

'It seemed boring at first, but it became real fun, getting more involved with your environment, you can't forget things. And its good for the wardens to have help' (12 year-old boy, Plymouth)

'We used to take it all for granted- you know, the hills and the trees...now, we take it for granted that we don't pick wild flowers, things that are illegal and anti-social, like litter and campfires' (14 year-old girl, Ambleside)

'it has made me go [to the Gorge] more; we take people down, make them notice things that we've noticed, appreciate the wildlife, and not throw things at the sheep' (14 year-old boy, Lydford)

'should make it a law that you have to recycle so much, or you get a fine- pay for every extra bag of rubbish' (15 year-old girl, Bude)

'we should try to live without damaging the environment... don't waste, don't damage things we don't need to, like through littering...' (15 year-old boy, Bude)

'We make our [NT] garden a happy environment for wildlife!' (12 year-old boy, Ilminster)

4.1.2 F/U Students: Impact on skill development

The interviews with F/U students demonstrated that a wide range of skills had been practised as part of their GS work. These can be categorised as social skills, research skills and craft skills.

Social Skills

The social skills related largely to those skills which helped children, especially those from a relatively small school environment or community, to be better prepared for entry into bigger schools and the wider community environment. Students mentioned team building skills (8)⁸, tolerance, caring, and group awareness:

'caring for the group, but thinking about the environment, not just ourselves' (15 year-old girl, Lydford)

They also mentioned self-discipline (3); when working away from school, in an exciting and potential dangerous environment, to be able to focus on learning, and 'knowing your way around'. Heads mentioned such things as inter-personal relationships (between pupils, wardens and teachers), pupils' self-esteem, personality development, self direction, confidence and the expansion of their outlook.

Research skills

Many of the activities that the pupils remembered had involved them in acquiring and using research skills. These are described in table 2 below.

Table 2: Research skills learned, as mentioned by F/U students

<i>Skill category</i>	<i>Examples given</i>
observation and identification	wildlife in general (3), flowering plants (4), trees (2), birds' nests (2), fish, deer, pond life, bats, bugs
measuring and planning	river studies (3), quadrat studies (2), orienteering
recording	drawing (4), keeping diaries (2), photography, drama, designing leaflets to inform the public, displays, printing
longitudinal studies	focusing on and identifying changes and patterns, e.g. in the growth of plants (2)

Craft skills

The most commonly mentioned skills in this section were those involving use of tools. Those mentioned involve tools for gardening, weeding, clearing, cutting, coppicing, cooking; tools for country crafts such as willow weaving; and those that would enhance their research, such as digital cameras and digital microscopes.

As important to students were the skills involved in making things. They instanced the skills described in table 3.

⁸ Numbers in brackets refer to the numbers of group discussions during which reference was made (i.e. max. 8), not to individual respondents.

Table 3: Skills involved in making things, as mentioned by F/U students

Types of objects made	Examples given
Objects involved in conservation activities	bird boxes (2), bat boxes, dormouse boxes, fences, a ladybird hut, beehives, scarecrows, and a 'hedgehog thing'
Useful structures	shelters(3) paths (2), bridges, rafts, dens, benches, dry stone walls, tree houses, willow houses, go-karts
Art work	collage (2), masks, sculpture from driftwood, 'found' objects

Each group had been involved in some way in each of the above categories of skill development, and could not only talk about this but could add to what others in the group had said. Moreover, they spoke with real enthusiasm about the activities that resulted in the kinds of skill development mentioned. There was also a commonly-mentioned interest in survival skills, sometimes linked to the Ray Mears TV series, but I did not find evidence that the development of such skills had been part of any of the GS schemes, other than occasional mentions of shelter- building and orienteering. Fire lighting, for example, was never mentioned, nor was purifying of water to make it potable or obtaining 'food for free' from wild fruits.

A small number of students interviewed, when in secondary school, had chosen to have work experience with the wardens at their GS property. These had become involved in more ambitious skill development, such as tree felling, hedge laying or kitchen work. All saw this as genuinely related to potential careers they might take up.

4.1.3 F/U Students: Impact on knowledge and understanding

This is the most difficult aspect of the study to pin down. It is relatively easy to identify areas of knowledge that the students thought they had learned about: these are identified in table 4 below. Finding out to what extent they had learned new knowledge and concepts, however, is in itself an undertaking too complex for such a small-scale study: going on to show that such learning was a consequence of GS experiences would be impossible, given the wide range of confounding variables, not least of which would be their non-GS experiences of the same properties and environments. All we can do is rely on the testimony of students and teachers as to what they think they learned.

Some comments however did provide indicators of learning being used. For example:

'I know more about gardening; I help my gran in her garden, because I know how to look after it and not destroy it' (11 year-old girl, Ilminster)

'we get more involved now with our environment- we're really looking after the woods' (12 year-old boy, Plymouth)

'I just love working outdoors- the excitement, always something different to learn, like the trees, the owls nests in the trees, and dealing with the floods...' (18 year-old girl, Lynton)

'I like going back to the same place each year with the same warden- you know your way around, you know about all the plants and trees' (14 year-old boy, Worksop)

'Our sewer treatment system- it's been fixed, but it still doesn't work...[goes into lengthy description of how it pollutes the historic salmon weir]... Lynmouth should be called 'where Exmoor meets the sewer' (19 year-old boy, Lynton)

Table 4: areas of knowledge that F/U students thought they had learned about

Knowledge about	Specific examples given (with numbers of sites mentioning these)
Wildlife	Wildlife in general (4); woodland (4), plants (4), planting (2), husbandry (3), camouflage Animals in general (4); bees (2), birds (2), frogs, bats, squirrels, ladybirds, badgers, foxes, ferrets Names of the above (2)
Food and nutrition	Food chains (2), Foods people used to eat- fish, deer Survival skills, Soil
Citizenship and sustainability	Litter (3), pollution in general Global warming (3), weather, ozone layer depletion Public Transport/car use (3), Tourism (2) Renewables (3), Fossil Fuels (2) Population growth
Environmental architecture	Rivers/Flood defences/bridges (3) Local archaeology (2) Sewage systems

The full impact on students' knowledge and skills across such a wide range is, however, difficult to determine. I did pursue in detail their understanding of the term 'Sustainability', as an indicator of their environmental awareness: however, with the exception of the 18-19 year-olds at Lynton, hardly any had a clear understanding of the term 'sustainability'. These older students, two of whom were about to make their career in GS-related work via FE or HE, discussed the concept in terms of balance, equilibrium, keeping things as they are; for example, planting trees to replace those cut down. They saw tourism as the greatest threat to the sustainability of their environment in North Devon: tourists, particularly they said from overseas, were excessively demanding, complaining, and left huge amounts of rubbish behind. Clearly, these former students had a powerful investment in sustaining the quality of their environment.

Younger F/U students found the concept of sustainability hard to explain; often, they said they had 'heard of it in geography' but did not understand it. In several schools, none of the F/U students could offer a definition. Sample responses were:

'something to do with G8' (14 year-old boy, Worksop)

'to keep things going- keep things how they are...things that can be re-used' (13 year-old girl, Lydford)

'to keep things going- keep the world the same way, so things won't run out' (13 year-old boy, Lydford)

'Make it so it doesn't run out, like wind power' (15 year-old boy, Bude)

When asked what they would change, however, F/U students had other specific things to say.

'Discovering ways to make ozone so you can put some back up there' (11 year-old boy, Ilminster)

'People should have less cars- we could all have electric cars, if they were good and cheap' (15 year-old girl, Bude)

'There should be more use of renewables' (12 year-old boy, Plymouth)

'we need more facilities for bird watching' (13 year-old boy, Lydford)

Interestingly, the issue of wind power as a source of renewable energy provoked strong discussion amongst the Devon and Cornwall groups, which divided very much along the same lines as the population in general, Cornish students supporting more wind farms, with those in Devon somewhat resistant, partly for aesthetic reasons, but also on agricultural grounds:

'we could have more windmills, but only small ones, and not near livestock' (13 year-old girl, Lydford)

And in the areas most popular with visitors, which happened to be part of National Parks as well as NT properties, all those interviewed has strong views about tourism:

'There are now too many tourists- they even get into residential areas, to park! They clog the park roads with traffic, and get lost... they should encourage tourists to come by public transport. Rail is cheaper than bus round here. There should be ID cards and discounts for travel by local people.' (15 year-old girl, Ambleside)

'what would I change? I'd get rid of the tourists!' (18 year-old girl, Lynton)

And one student in the Lake District went so far as to say, *'everything is green! There's too much green round here, we need variety!'*

I asked F/U students about other specific conservation organisations, and about TV programmes related to the environment. In terms of organisations, virtually all those interviewed were familiar with Greenpeace, though some found it harder to explain its function:

'they're Eco-warriors, they fight for the environment, verbally not physically of course... they've got a ship' (13 year-old boy, Ilminster)

Oh, it was on the news- about divers, and dolphins' (12 year-old boy, Plymouth)

Most were also familiar with the RSPB and its role, and most said that they had heard of wildlife trusts (which some confused with WWF and the panda logo). Hardly any had had contact with their local WT organisation; this was also true of National Parks, which very few could describe, even those that lived inside a national park themselves. Few students knew about Friends of the Earth or BTCV either.

Most of the factual learning appeared therefore to be very context-dependent, linked to the specific site they had visited. One area however that most children were familiar with, and

extremely animated about, was recycling, even though this was not necessarily prominent within the GS programme:

'yeah, we had the SWAP Team⁹- they're wicked- we've had them twice, and at Barrington. They gave us this sheet- had them for workshops- made bird feeders- really cool. They stop rubbish, they recycle instead of making pollution, took us to visit landfill sites. (11 year-old boy, Ilminster).

The TV programmes most often mentioned by F/U students were those by David Attenborough (mentioned by 6 groups); Bill Oddie (4); Ray Mears (3); the Really Wild Show (3) and Steve Irwin (1). Three mentioned that they watched 'animal programmes' in general.

4.1.5 F/U Students: Evidence of impact on enjoyment, inspiration and creativity

There was a virtually unanimous view amongst the F/U students that GS work was fun, exciting, enjoyable, better than school, and that wardens were much better to learn from than teachers. The rare negative comments related either to having to walk too much, getting wet or having to eat lunch standing up. One boy did claim to have been bullied whilst at the NT site, but he went on to say that he was also bullied by the same boy in school, and that it was nothing to do with being out of school. The positive statements were all made in the animated tone of voice that exuded good memories- clearly, going out to 'work' in a rock-pool, a wood, a kitchen garden, a pond, or simply in a novel environment, enhanced their positive feelings for what they often did not think of as work.

This only served to reinforce the evidence of the earlier evaluation, which provided much more detailed information in the form of displays, children's diaries and scrapbooks, photographs, sculptures and paintings, creations such as bird feeders, and letters. Children talked in very positive terms of the inspiration from wardens, who know so much more about the environment and are more relaxed in the way they deal with children off-site. I have a powerful memory of a 10 year-old boy at Woody Bay, near Lynton, walking into a rock pool in his trainers (he had forgotten his wellies), catching shrimps with a net, then spending perhaps 40 minutes engrossed in a beautiful coloured drawing of a shrimp, from life; all the time talking to me in amazement about the different coloured bands on its legs, or how it moved. Such experiences stay with children for a very long time.

Teachers often substantiated students' views on their learning. Table 5 indicates how school staff involved with the GS (mostly headteachers) assessed pupils' learning as a consequence of their GS involvement. The areas most often singled out were social and emotional development, especially in relation to their attitudes to working together and with wardens and the consequent team-building and inter-personal skills. The learning of knowledge was most often emphasised as significant where the school and the NT warden had jointly worked out a programme that set out to integrate and therefore reinforce work done in school and off-site.

'It's amazing! About 80%, I would say, not only treat the woods better, they treat each other better. They gain confidence and so encourage links with their parents,

⁹ The Somerset Waste Action Programme, an outreach team based at Carymoor Environmental Trust, on a working landfill site (Vrdlovцова, 2005). The team is funded by a consortium of District Councils, and visits all schools across the county, providing regular support for work on waste minimisation.

who come in to the classroom after school; and they've seen their older siblings involved, so that they look forward to looking after 'their' patch (Teacher, Plymouth)

Table 5: Teachers' perceptions of pupils' learning within the GS

Learning category	Extent to which teachers felt that pupils had learned during the GS		
	A great deal	To some extent	Not at all/can't tell
Knowledge and understanding	4	4	0
Skills	4	4	0
Attitudes and values	6	2	0
Enjoyment, inspiration and creativity	5	3	0
Changes of behaviour	3	5	0

'I'm not sure about the long term, but [in the short term] they develop a real understanding of conservation, and become environmentally responsible, make decisions. (Headteacher, Worksop)

'The main thing is self-esteem: I can't overestimate the value in terms of social skills and self-esteem. It reinforces the 'can do' culture, the enjoyment in learning. And it changes their behaviour in school- the relationships with each other. As staff, we try to stand back and let wardens lead, as they have the ability to nurture this. [The warden] is exceptional' (Headteacher, Ambleside)

'It brings to life the natural science curriculum, ecology and geography; and the social and emotional development, teamwork, caring, group work, thinking about the environment, not just about themselves.' (Headteacher, Lydford)

'The key is raising sensory awareness, with all the senses; more of them are kinaesthetic. The most successful activities are those where children have been able to produce evidence and displayed it for others. They become more co-operative, develop group awareness; they pick up a kind of passion for care and respect.' (Headteacher, Bude).

4.1.6 F/U Students: Evidence of activity, behaviour, progression

It is difficult to separate this from previous categories, particularly as long-term behavioural change is particularly difficult to ascertain. The impact on subject choice at GCSE was not seen by students as significant, even though quite a few had chosen geography; science is of course compulsory, and only just over half of those in the sample had reached the stage of making GCSE choices. There were examples, as has been noted, of students choosing to do work experience with the NT, or to choose land-based studies after leaving school; but these were a relatively small number, about 10% of the total.

The main change in behaviour that students referred to was the frequency with which they continued to visit the site. 68% claimed that they still visited the NT property regularly, and 35% indicated that they were NT members, either as individuals or as a family.

'yeah, we still go down; we know our way around, we know about the plants and trees' (14 year-old girl, Worksop)

'We go with our parents- at least, they don't go unless they go with us! We feel privileged to live around here.' (18 year-old girl, Lynton)

'We do, and so do our parents- dog walking, smelling plants, fell walking, paddling, fishing- I collect sheep skulls!' 15 year-old girl, Ambleside)

'We check the pollution on the river, dog doo on cycle tracks¹⁰, put bird food out. We need more facilities for bird watching there' (14 year-old boy, Lydford)

'My family have joined the NT- we've been to that big house near Yeovil [Montacute] (11 year-old girl, Ilminster).

These responses and others testify to an ongoing attachment to the NT site, its natural incorporation into the lifestyle of many students. To what extent this might have happened without their involvement in the GS scheme is of course impossible to determine; but the students themselves clearly think there is a link.

In Case Study 1, Appendix 8.6, find a description of a young man who had developed his relationship with the GS warden and the NT site over a period of around 10 years, progressing to more and more understanding and commitment as he grew. This sustained link, only possible where students stay in a community close to the property, seems to be a key factor in developing commitment, attitude change, thoughtfulness and extended knowledge of environmental issues, from local to international levels.

4.2 Impact on teachers and schools

The F/U students felt that the serial nature of visits was crucial in establishing the idea of the GS as part of their ongoing curricular learning. Students had many recollections, once they got talking, of exactly what they had done, when, and why. Teachers explained the programmes that they had worked out jointly with wardens; in some cases, this included a clearly built-in progression in learning, from Nursery through to Y6 (see table 6 below, and appendix 8.5).

A very wide range of activities was planned and engaged in across the schemes visited, covering attitude change, fun and enjoyment, skill development, knowledge of the environment and behaviour change. Teachers felt that the GS was successful in achieving all these objectives, especially attitude and behaviour change. Raising self-awareness and self-esteem, being more co-operative, team awareness, respect, learning to listen, curiosity, stimulation, and above all, 'a good day', were often mentioned, over and above the knowledge and skills linked to their specific context.

¹⁰ A national cycle route passes by the school and the NT property

Table 6: Progression and continuity in one GS scheme

Year group	Activity (Windermere and Troutbeck)
Nursery	Two half-days in school- growing seeds, planting
Reception	'Mrs. McGregor's Garden' at St. Catherine's
Y1	Sensory awareness at Acorn Bank
Y2	Woodland, meadow and stream walk at St. Catherine's
Y3	Work in school grounds- wildlife, pondlife, sculpture
Y4	Woodland work on mini-beasts
Y5	River work, Skelgill woods
Y6	'A sense of place'

Some schemes linked closely to the school curriculum; others did not. Four of the eight partnerships had developed programmes of work as part of the GS which integrated work off-site with that in school; parts of these were jointly taught, and in three cases, this had involved wardens visiting schools and sharing some of the input (see examples in appendix 8.5). In some cases, there were positive ideas about developing modules and awards related to GS work, though none of these had as yet developed as far as actual schemes on paper.

Teachers saw the GS opportunities enhancing school work in a number of ways. In **Worksop**, it was seen as 'the classroom in the park', where ideas and activities were trialled that could be of value as part of curriculum work, in subjects such as history as well as geography and science. At the same time, spontaneous advantage could be taken of whatever was going on at the time, such as a 'fungi forage' in the autumn. The head was convinced that these activities led to students' enhanced understanding of conservation, and to making them more environmentally responsible; for example, one spin-off for the school had been to learn about and implement composting and a much expanded and developed school garden.

In **Ambleside**, the head saw many benefits from participation in the scheme. First of these was 'the expertise of high quality providers' in the form of the wardens and the community education officer: he encouraged staff to 'stand back and let the wardens lead'. Also important was the fact that the work made use of the immediate locality- the pupils' own environment- as a venue for learning:

'working in the outdoor environment that surrounds them with experts, they see the bigger picture, and get an idea of what is sustainable' (Head, Ambleside)

He valued also the development of a wide range of inter-personal relationships (between pupils, wardens and teachers) and consequently pupils' self-esteem and social skills, and explained that he saw the GS as their way to adapt and deliver the requirements of QCA to create an 'Ambleside Curriculum and Assessment' programme, the benefits of which were cumulative. He felt that the school was very fortunate to have such an extensive NT property surrounding them.

At **Lydford**, the Head saw the main benefits in terms of children's 'academic natural science learning'. She felt that the GS programme 'brings learning about ecology and geography to life' and develops their teamwork, caring and group work. This was a consequence of valuable conservation work such as coppicing and the protection of habitats. And by focusing on the work of the NT in the 'close season' for tourism, a balance and symbiosis was established between school and wardens, who have planned

work together much more closely as a consequence, even though the warden only makes 'social visits' to the school. The head hoped that this two-way working would develop further in future, as this would benefit both the school and the National Trust.

At **Kilkhampton**, the benefits were seen by the head as being a huge development of 'community spirit' and valuing what was 'in their own back yard'. She pointed out that parents know the wardens well now, which has led to a willingness of everyone to get involved, including staff (one of whom is a local farmer's wife), coastguard, ambulance driver and others in the PTA, who now do more than simply ferry pupils to the property. All this has led to significant physical development of the school grounds, building new grass banks, a kind of amphitheatre, trees and new habitats. The publicity provided by leaflets, photographs, displays and items about their GS work in the local press (collected in a substantial portfolio) all enhance community interest and participation. The sponsorship money which comes with the scheme had also been used to provide transport, storytellers and equipment such as microscopes to enhance rock pool studies. There was no question in the head's mind, however, that the scheme would continue even if the NT sponsorship of the scheme ended, though she realised it would be harder for the wardens to sustain involvement under these circumstances.

At **Farnham**, a school for pupils with learning disabilities, the key element was again seen by staff as the development of pupils' confidence and the expansion of their outlook; their speaking, listening and social skills, especially the ability to work co-operatively; and their involvement in problem-solving and decision-making. There was no sense in which these were 'trips'; the pupils really looked forward to the hands-on practical work in their 'outdoor classroom'. Many of these pupils would otherwise never leave the town, it was felt, and they therefore appreciate and remember their visits as 'something amazing'. Their understanding of visitors' needs had arisen partly from their own concerns and partly from a survey they undertook, and had led to them developing new ways of providing disabled access to the ponds, as one of the students was herself wheelchair-bound. The teachers felt that the pupils 'looked back at their school much more positively' as a result of their GS experiences. Several ex-pupils had made the choice to go on to FE college in Guildford to study Land-based Industries or Small Animal Care, two of whom are described in more detail in the following case study.

Case study 2: two students with learning difficulties

The two students A. and B. attended The Abbey Special School, Farnham, until summer 2003, where they were fully involved in the GS at Frensham Ponds, in such activities as painting murals, clearing reed beds and making bench seats for visitors.

They joined Merrist Wood Campus of Guildford FE College in September 2003 to study the Country Start (entry level) programme in Small Animal Care. In 2004, they then both progressed onto the Next Steps (level 1) programme in Animal Care. According to their tutors with whom I corresponded, they have both been highly committed students and have succeeded well in their studies: both are returning to Merrist Wood this September.

A. has developed his interpersonal skills and will be studying First Diploma in Animal Care (level 2). He is expected to achieve this course at a Pass grade. Student B. has reached his potential as far as academic level goes and will be studying Country Start (entry level) programme in Horse Care. He will then be

encouraged to seek employment at the end of this one-year course. Their performance is seen as highly creditable by staff, and indicates the potential of the GS to inspire and involve a wide range of students.

The success of the scheme with such students led to the school 'reviewing and revising its paperwork' in relation to the curriculum for SEN pupils, to the appointing of a KS4 manager for the GS, and to the involvement of more staff in supporting the programme, a kind of 'informal CPD' for some. They were developing a module within the ASDAN¹¹ award system entitled 'Local people, local places', to be incorporated within the Community Work element of the scheme (www.asdan.co.uk). One teacher felt that a 'GS module' could well be written, in collaboration with the wardens. Because the school is heavily resourced to support its pupils, the staff had not needed to take advantage of the GS sponsorship funds, and in fact were not even aware that these existed.

The teacher involved with the scheme in *Plymouth* talked about the benefits in terms of self-esteem, confidence building, personality development, self direction, and a consequent reinforcement of their involvement with the curriculum. Key to this was the 'quality of advice, and quality of experience' from the wardens involved; continuity of contact with a specific warden was a key feature of this. An annual 'Task Overview' had been jointly developed covering all five visits and focusing on practical work such as path cutting, making and locating bird boxes, pond work, mapping, shadow studies and litter picking. She was sure that these experiences influenced some children's future choice of subjects in high school, and said that at least half of all pupils now take their parents to the woods.

This developing link with parents is in turn encouraging more of them to come into school, after lessons and in the evenings. It was felt, however, that it is difficult to judge the impact on the school, which had simultaneously been going through other important changes. The main impact was probably on ethos- the valuing of 'getting kids out of the classroom- there's always something to take them by surprise' and the peer tutoring of younger pupils by older ones, which this could lead to. There was also an impact on other teachers; participating outdoors alongside wardens was a valuable and different form of professional development for them, one where they were not being 'talked at'.

Finally, at *Barrington*, a First school in a small village, the teacher involved talked about the way the work tied in with and supported the children's science work on growing plants. The programme enabled them to have first-hand experience of the full cycle- planting, growing, harvesting, eating- and their intimate contact with a professional gardener, who introduced them to a wide range of tools and growing mediums, and 'expanded their horizons' through helping them to 'meet the general public'. She felt that it also opened their eyes, even at this age, to alternative rural job opportunities.

The school benefited, she felt, from the fact that wardens consulted the school in detail about how best to spend the sponsorship money, which supports not only the work at Barrington Court through providing tools etc., but also trips to related venues such as the Eden Project and other NT properties such as Knightshayes, where similar gardens can be seen by children. Teachers were all keen to be involved in these experiences. The funding was crucial to the involvement of their partner school at Ilton, as minibus transport was needed to bring these children to Barrington Court. Working with children from

¹¹ ASDAN (Award Scheme Development and Accreditation Network), linked to the University of the West of England in Bristol, offers a number of programmes and qualifications for all abilities, mainly in the 11-25 age group.

another school was seen as a significant benefit to the children in terms of social skills. Primary school staff could therefore see the benefits in terms of relationships between children and wardens in particular, as well as between children and teachers, children and the general public within their community, and between teachers and parents, where the scheme reduced barriers to parents visiting school and becoming involved, even if only in transporting children to the property.

Heads also expressed regret that the scheme did not continue into the children's work in middle and secondary schools. In one or two cases, this was seen to be a consequence of the high school not being good at liaison with their feeder primary schools; otherwise, Heads could not give a clear reason why the benefits could not be sustained. In two contexts, clear progression through KS3 work experience on to post-16 further education could be clearly seen, so that there seemed to be no reason why this could not happen in other contexts, provided liaison and commitment existed.

4.3 Wider benefits to families, friends and the community

Whilst it would be valuable to be able to quantify such benefits, it is clearly difficult even for teachers closely involved in GS schemes to be specific about the extent to which people outside the school were aware of and took advantage of the GS involvement of the local school. There was no doubt in the minds of both pupils and teachers that parents and siblings visited NT sites more frequently as a consequence of the awareness-raising by their primary age children; and in some cases, notably those in smaller, close-knit communities, it was evident from the display material I was shown that schools were making a considerable and successful effort to publicise their GS work to their community.

The extent to which students and their families continue to visit the NT property, or are family members, seems to depend on the type of property they are associated with and the nature of the school's involvement. At well-defined properties such as Barrington Court, Clumber Park and Lydford Gorge for example, that are close to the school, students were much more like to re-visit and be members, than at more diffuse coastal or lakeland properties such as in North Cornwall and Cumbria.

One consequence of this continuing involvement, in several cases, was the increased willingness of parents to come into school for various events and meetings. Wardens were particularly aware of the need to involve parents and the wider community, and had strategies for this as part of the GS.

I did feel however, as in the earlier evaluation, that only a minority of partnerships were taking full advantage of opportunities on site to publicise their work, through signage, leaflets, captions on installations they had made etc. Where this has happened (e.g. the case at Studland instanced by Gadstone and Kemp, 2004) I observed first-hand how visitors to the site took notice and expressed both surprise and interest in the idea that young children were actively engaged in conservation, stewardship and research in partnership with the Trust. Not only is this good for the school and its pupils; it impacts in very positive ways on the image of the NT in the public eye. My own perception of the NT has also been very strongly and positively influenced, as has the perception of others with whom I have shared these observations.

Table 7: students and families' continued involvement with the NT, in relation to numbers interviewed

<i>Property</i>	<i>Students still visiting</i>	<i>Families who are NT members</i>
Barrington Court/ Swanmead Middle School	13/15 ¹²	9/15
Clumber Park/ Portland High School	9/9	5/9
Duckpool & Sandymouth/ Budehaven Community Coll.	1/7	1/7
Lydford Gorge/Tavistock College/Okehampton College	5/7	3/7
Windermere & Troutbeck/ The Lakes School	7/9	0/9

A further benefit, which is perhaps only just beginning to be taken advantage of, is that on teacher education, both initial and in-service. Several Heads and teachers noted the CPD dimension of their work with other teachers; but I feel that there is a much greater potential benefit in terms of the involvement of young teachers during their training. At present, only a few ITE programmes provide trainees with opportunities to work with children outside the school (Peacock and Bowker, 2004); yet both trainees and hosts involved in such programmes have testified to the real value of the experience. All GS partnerships are within range of an ITE institution that would probably be keen to involve trainees through visits or short-term placements; in turn, these teachers once qualified would hopefully promote similar schemes within their schools.

4.4 Benefits to staff and volunteers at NT properties

Both current pupils and former students were full of praise for the wardens they had worked with, and talked of them with great respect, affection and admiration. In many cases, it appeared that the relationship with a particular warden was as important, if not more important, than the links to a specific site. When you observe, as I did, a group of first school pupils rush up to a warden on arrival and all give him a hug, you know something good is happening! In rural locations and small communities in particular, former pupils often kept contact with wardens, who are usually members of the community themselves. In two cases, the decision of former pupils to work at the NT site was very much an outcome of these strong bonds.

A key factor is also the impact of wardens' GS work on the public image of the NT in the community surrounding the property. This was mentioned by all wardens during the earlier evaluation, especially in the communities of country properties such as the Lizard and Watersmeet/West Exmoor, where the Trust is a major landowner. Within the GS, wardens are the public face of the NT: they are universally regarded in schools with respect for their knowledge and skills, as well as with affection for their way of working with children.

All wardens however are aware that they are not teachers; and that whilst they have developed their skills and need further professional development, this role separation is an advantage. Most of the school staff involved with the GS mentioned that wardens' work

¹² 13/15 indicates that 13 students of the 15 interviewed claimed still to be visiting and actively involved

with children over a long time had helped develop their teaching and pupil management skills:

'[the warden] is not a teacher, but he always keeps control, because he really knows what he's talking about' (19 year-old boy, Lynton)

'[the warden] is exceptional. The children have got to know him really well, we stand back and let him lead, and he takes a 'clean slate' view of them, especially the SEN children. In terms of training- It's crucial that they relate well to children- we take for granted some of their knowledge and skills, and we know its harder for them at KS3 and 4'. (Headteacher, Ambleside)

'Our parents know the wardens well now. Its about helping people get beyond their comfort zone- and trusting people helps you take risks' (Headteacher, Kilkhampton)

'[the warden] took time to pitch things at their level- maybe he was too technical at first- but its now perfect. And its CPD for [the warden] also. He's committed, gets on well with our staff, and its good for our [SEN] pupils to see adults working together in a relaxed environment' (Teacher, Farnham)

'We get good feedback from parents, and its good PR. We go up to the school in September and work out the whole year plan with them. We'd like to get them involved in restoring the orchard and fishponds [at Stowe Barton] but so far, Property Management have vetoed this...' (Warden, Duckpool)

'I think initially it was a problem knowing how to talk to young children. I did the GS 'skill swap' last November, which was very helpful, and we're now bidding for money to use a storyteller, tools, perhaps hire a minibus to get them there... for me, the teachers' role is to keep order where necessary; wardens tend to give children a bit more leeway! I've learned how to make the link between my ideas and what they already understand- that's the rewarding thing' (Warden, Lydford)

'The GS has certainly impacted on the image of the Trust in Ambleside, and we're keen to push this more. For example, we've done a display for the parents, and some came along to help. But it's good to be a warden, not a teacher! I tend to let teachers discipline children where there are specific difficulties. As for training- yes, I think we need it in terms of ideas for practical sessions, about how to hit school targets, but its about inspiration, not methodology. Its not about learning to discipline them!' (CEO, Ambleside).

I discussed warden training during both evaluations, and the feelings of wardens were fairly consistent across all properties. Wardens do not want to become teachers, or disciplinarians; they are very happy working with primary age children, and need only to learn how best to help fit their work into school requirements; and they particularly like to meet others working within the GS, to share ideas and generate new inspirational activities. However, they are less confident about the possibility of working with secondary school children, even though most had not experienced this. If there is to be a move to sustain and extend the GS across the transition, therefore, training alongside secondary school staffs would be an essential precursor.

All wardens spoke positively about the benefits of their experience within the GS; and this was indicated by the amount of effort they put into liaison with a wide range of people in

both the school and the community to build local relationships. Several thought that the GS could and should be extended to include more schools; some were actively engaged in bringing this about, though there was also a view that this could not be at the expense of their other conservation role, which was also still a major source of job satisfaction.

4.5 Summary of findings

Long-term impact on students

There was a virtually unanimous view amongst the F/U students that GS work was fun, exciting, enjoyable, and better than studying similar topics in school. Their perceptions indicate that the impact on their attitudes, behaviour and skills was greatest; students' responses also testify to an ongoing attachment to 'their' NT site; many (over 50% in the estimation of some teachers) seem to have incorporated it naturally into their lifestyle. 68% claimed that they still visited the NT property regularly, and 35% indicated that they were NT members, either as individuals or as a family. A small number of students interviewed, when in secondary school, had chosen to have work experience with the wardens at their GS property.

Hence the most striking observation from their comments was their continuing concern to protect the local environment that they visited during their involvement with the GS. As the title of this study indicates, one student summed this up in saying that it is about 'thinking about the environment, not about ourselves'. Many students saw tourism as the greatest threat to the sustainability of their local environment. At the same time, this emphasised that their concerns were much more related to this local context than to environmental issues in general, although most students also mentioned their changed attitudes to recycling and avoiding waste. Teachers indicated also that the work contributed to a development of pupils' confidence and the expansion of their outlook; pupils 'looked back at their school much more positively' as a result of their GS experiences.

Students' skill learning involved social skills, research skills and craft skills; school staff and wardens felt the biggest impact was on social skills such as self-esteem, confidence building, personality development, self direction, teamwork, working with adults and community spirit. It 'expanded their horizons' through helping them to 'meet the general public' as well as strengthening relationships between children and wardens in particular; between children and teachers, and between children and the general public within their community.

Students also emphasised the learning of observation, recording and data analysis skills, using a range of media including photography; and a wide range of skills involved in the use of tools and making things, from bird boxes to sculpture, weaving and furniture making for NT sites.

The impact on students' knowledge was related mainly to wildlife, food and nutrition, citizenship and environmental architecture; most of the factual learning appeared therefore to be very context-dependent. The learning of knowledge was most often emphasised as significant where the school and the NT warden had jointly worked out a programme that set out to integrate and therefore reinforce work done in school and off-site: four of the eight partnerships studied had developed programmes of work as part of the GS which integrated work in this way. Some key environmental issues such as water quality or energy/fuel use were however not very apparent in any of the schemes studied. Wind power as a source of renewable energy did provoke strong discussion in both Devon and

Cornwall, but not elsewhere. In terms of other organisations involved in environmental education, most students were familiar with Greenpeace and the RSPB, but only had vague ideas about other agencies.

Impact on schools and teachers

As in other evaluations, this study has emphasised the value of serial visits rather than 'one-off' experiences, which are crucial in establishing the idea of the GS as part of their ongoing curricular learning. Schools saw great benefits from having a 'classroom in the park' and that the work made use of the immediate locality. There was, headteachers felt, a huge development of 'community spirit' and valuing what was 'in their own back yard'. In most schools, publicity provided by leaflets, photographs, displays and items about their GS work in the local press (collected in a substantial portfolio) all enhance community interest and participation.

Several schools saw the GS as the best way to adapt and deliver the requirements of QCA to the needs of their children. Pupils' 'academic natural science learning' benefited; and they felt that the expertise of high quality providers (i.e. wardens) made an impact on this. One special school was 'reviewing and revising its paperwork' in relation to the curriculum for SEN pupils, as a consequence of their involvement with the GS scheme, as they saw its effects on reinforcing students' involvement with the curriculum. The GS was also seen by most schools as having an impact on links with parents, reducing barriers and encouraging more of them to come into school, after lessons and in the evenings, as well as involving them in more ways than simply ferrying children to and from the property.

Impact on the Wardens and the National Trust

Heads, teachers and wardens themselves all felt that the scheme impacts in very positive ways on the image of the NT in the public eye. For whilst the 'public face' of the NT as far as schools are concerned is often the wardens themselves, for the general public, the public face is more likely to be the physical features and the enterprise side as represented by cafes and reception staff. Older F/U students in particular could see this dichotomy, and the importance of the GS as 'good PR' for the Trust. However, evidence of schools' involvement with properties was often invisible at the properties themselves.

In many cases, it appeared that the relationship between pupils and a particular warden was as important, if not more important, than the links to a specific site. In rural locations and small communities in particular, former pupils often kept contact with wardens. In two cases, the decision of former pupils to work at the NT site was very much an outcome of these strong bonds.

The scheme was helping develop wardens' teaching and pupil management skills in a variety of ways which were valued by wardens themselves. The key areas of benefit were first and foremost in talking to younger children; finding interesting starting-points for activities and organising work effectively; and (from the schools' point of view) integrating these activities with the school-based curriculum programme. At the same time, it was clear that wardens did not want to 'become teachers' by adopting school-based approaches to disciplining children, for example: they were happy to leave this to teachers themselves, although in my extended observations of work at NT sites, this was rarely necessary. The very strong impression I got from these observations was that children looked forward to their visits, became engrossed in their activities and had great respect for the wardens, behaving in very responsible ways 'for' them.

Only one of the wardens worked with post-primary age children, however. The others were often concerned that older pupils would be difficult to deal with, and there was a hint in some cases that wardens feared resistance, at their properties, to the spectre of teenagers running riot around the flower beds.

Areas where impact is less apparent

The aspects of students' learning that were less visible in the study referred mainly to the lack of extension from local to national and global matters. For example, whilst F/U students could talk at length about the pros and cons of wind power in their area, they did not seem to have taken this further to think about the implications for the wider shift from fossil fuels to renewables in relation to global climate change. Likewise, they were very concerned to support local efforts in recycling and waste minimisation, but had little to say about wider issues of sustainable consumption. This is probably a consequence of the fact that their GS learning was in many ways suspended during their secondary schooling, so that links were perhaps no longer being made between local and global concerns about the environment.

The impact on subject choice at GCSE was not seen by students as significant, and was therefore difficult to ascertain, though teachers were far more convinced that the GS did make a difference to their subject choices. I estimate that about 10% of students interviewed were likely to have had their study or career direction directly influenced by their GS experiences.

5 Recommendations

5.1 *Key factors in successful schemes: a template*

The following suggestions provide guidance to the NT, based on analysis of the findings in section 4, in terms of a 'template' for a successful Guardianship Scheme that would be most likely to have long-term impact on the pupils and schools involved.

A compact community and property

The schemes seem on balance to be more successful in small, compact, rural communities, especially those where both Warden and Head live locally and are both part of community. This is reinforced where there has been long-standing contact between Warden and Head. Evidence suggests that in such communities, students are more likely to continue visiting the site, and their families are more likely to become or continue to be members of the NT. The above continuity of contact is also likely to be greater at well-defined properties close to community, such as Barrington Court, Clumber Park or Lydford Gorge, and where older siblings that were involved in the scheme are still in the area.

Early and sustained engagement with the scheme

The most effective schemes involve children from as early an age as possible. Evaluations of similar schemes in the UK, as well as research from other countries, supports the view that the impact is greater and longer-lasting when children are introduced to environmental ideas early (Vrdlovцова 2005, Helden 2003). Frequent and regular serial visits throughout the year also support learning, enabling progression to be built in to the scheme, reinforcing previous learning. A good example of this is the kitchen garden work at Barrington Court.

Wide range of learning objectives

Effective programmes concentrate on a holistic approach to learning, recognising the value of new social and practical skills, attitudes and behavioural change, rather than on knowledge alone. Learning is strengthened where there is joint development of programmes between warden and school, extending over the whole academic year and across as wide an age range as possible. Good examples of this kind of collaborative development were seen in Ambleside, Plymouth and Kilkhampton.

The role of the warden and teachers

There is a general consensus that schemes work well when the wardens and volunteers involved are enthusiastic, well trained, and experts in specialist fields. Separation of roles and strategies adds credibility and authority to wardens' work; schemes have most impact when teachers take a subordinate role in the field, whilst at the same being full involved in joint planning and in preparation and follow-up in school.

Support of property staff for custom-made schemes

Schemes have more impact where they make the most of the uniqueness of the property and where the property has a positive strategy for parental and wider community involvement. Where the property staff are not 'on side' - where there is no 'common learning vision' as one CLO put it - then valuable opportunities may be missed, diminishing the impact on learners. My personal experiences of accessing sites has been that, whilst wardens themselves are exceptionally accommodating and welcoming, reaching them sometimes means getting past less helpful employees, which may also put off other less determined members of the public, such as parents visiting for the first time.

Clear lines of communication with other officers in a cluster/region

There remain some confusing arrangements, which can differ from region to region, in terms of managerial relationships between properties, clusters, regions and HQ. This may not have been helped by recent changes of personnel in some areas. The anxiety at some properties about possible redundancies has also made some wardens uneasy and wary about their involvement in the future; it is understandable that, having worked to develop a successful scheme over several years, the thought of there being no permanent warden on site to continue links can be very discouraging. Many properties are relatively remote from HQ; it is therefore understandable that wardens sometimes feel out of touch and uncertain about such changes.

Work experience opportunities on NT property

Where these exist, they currently offer the main way for secondary age pupils to remain involved, and to help bridge the lack of contact during teenage years, and it is therefore important to preserve or develop such opportunities through liaison between property, primary school and secondary school.

Effective publicising of GS activity

Some schools and wardens were exceptionally good at this, and aware of its importance. In Kilkhampton and Clumber Park especially, a wide range of opportunities to publicise the GS within the community, through displays, events and the local press, had been taken up. In the earlier study, the schemes at Studland, The Lizard and Hardcastle Crag had also used publicity to great effect.

Good liaison procedures between primary and secondary schools

This is perhaps the 'Achilles Heel' of the scheme at present. Where primary schools do have good systems for liaison, it may in future be possible to establish an ongoing scheme across the primary-secondary transition. All the evidence of this and the previous study, however, shows that school involvement tends to stop when they enter secondary school, even though children continue to visit informally; it is only through individual links with wardens and sites that impact is sustained. The best example of this can be seen at Lynton.

5.2 Future Areas for Improvement of the Guardianship Scheme

This section sets out some of the potential ways in which the GS as a whole, as well as individual schemes, could have even greater impact on participating pupils and their schools.

Recommendation 1: Investigate ways of establishing some continuity within the GS between primary and secondary schools. This will not be easy or quick, and is probably best progressed by attempting to work closely within one 'pilot' scheme that has been identified as offering the best opportunity. The key elements of this would be a long-standing successful scheme within a compact community, where the partnership has already developed a joint, integrated scheme of in-school and on-site work across the curriculum, and where there is already good liaison between the primary school and the high school(s) it feeds. A precursor to this would be meetings with heads and wardens in selected schemes, prior to inviting a high school to participate in some way, perhaps initially through work experience and peer teaching of primary GS pupils only, before attempting to move to a full-blown scheme involving a cohort of pupils in Y7. A further way to prepare for this would be to examine relevant new GCSE science curricula such as '21st century Science' which has been piloted during 2003-5, and which from September 2006

will offer modules in science areas relevant to the GS, such as 'Human Impacts on the Environment' (downloadable at <http://www.qca.org.uk/12265.html>).

Recommendation 2: In the light of the current ongoing changes in the way schools work, and particularly the Primary Strategy, consider joint development of medium- and long-term plans in every scheme, along the lines of those exemplars mentioned here, through wardens, teachers, CEOs and CLOs collaborating more closely in this process. This will only serve to enhance the likelihood that secondary schools will see the benefits of engaging and supporting the continuity of schemes.

Recommendation 3: encourage schools to devote more time to follow-up work that extends the focus of children's learning from the powerful local experiences of the scheme to the bigger, global issues and concepts that they represent. This too will be dependent on development of effective ongoing schemes, but will also be an essential precursor, I think, to secondary schools seeing how the work fits in with the demands of their curricula. For example, several schemes did work on local rivers, beaches, flood defences and bridges; this might be extended in various ways to focus on concepts related to water quality, sewage treatment, microbiology or 'water wars'. Upper primary or secondary school students in an area like Somerset, where a large area lies below sea level, might research and plan a simulation exercise based on the hypothetical flooding of the Somerset Levels, applying what can be learned from the recent floods in the southern states of the USA. In a similar way, studies of local roads and transport could lead to work on oil prices, consumption and the future implications for road, rail and air travel; or work on plants could be widened to consider the impact of growing biomass (for bio-fuels and powerstations) on ecosystems.

Recommendation 4: Design and produce Interpretation Boards of various kinds for installing on the sites where children work, to explain about their work, sponsorship, and how the GS operates. At least some of this information, such as leaflets that members of the public can take away, should be written and designed by the children themselves. Wardens could also be more directly involved in this process in schools or in the community where possible, as well as at the site, to strengthen links.

Recommendation 5: Invest in the continued training of wardens for the GS scheme. This can be done partly through extending the conference programme that already exists, perhaps by additional regional training days for GS wardens; but also through strengthening links with ITE institutions in order to benefit from the expertise of teacher trainers and specialist trainees. When appointing new wardens, it would also be worth appointing appropriate specialists with QTS to posts that can specifically support the GS scheme in each region, such as that of the Community Education Officer in Windermere and the Cluster Learning Officers in the South West.

Recommendation 6; draw on the expertise of successful schemes to publicise and develop effective strategies for community and parental involvement strategy. Both Heads and wardens in some of the schemes indicated above would be excellent ambassadors for this programme.

Recommendation 7: Continue to talk with wardens about how to improve internal lines of communication and decision-making that would in turn increase morale in areas where some wardens feel marginal. Clearly there are different procedures in different regions, and wardens are not always easy to contact; for these reasons, it makes sense periodically to bring wardens together specifically to address issues like this and those

raised in recommendations 5 and 6. It might also be valuable for HQ staff on occasions to 'turn the telescope round' so to speak, and to spend time looking at the organisation of the GS from the other end, on a moor, beach or wooded valley, with no mobile 'phone connection.

5.3 Final thoughts about "Education outside the Classroom"

Even though it is difficult to quantify impact, it is nevertheless very apparent from this study and a range of others already referred to, that working outside the classroom on curriculum-related topics with expert adults has many tangible benefits for pupils across a wide range of age and attainment. Those benefits encompass attitudes to learning and related skills in particular, as well as to behaviour and the learning of new facts and concepts. It is the change in attitudes in particular that helps sustain children's interest and thus makes an impact beyond the programmes themselves. Where programmes such as the Guardianship scheme are concerned, which have recurrent or serial involvement built-in, the impact is likely to be much greater than with one-off visits, however exciting or valuable these are in themselves. In addition, opportunities for children to learn outside the classroom, and the profile of such work, have never been greater; a wide range of agencies and centres are now actively promoting and supporting 'outdoor classroom' opportunities, and the Association for Science Education has made outdoor learning one of the main themes of its January 2006 conference.

It may seem paradoxical, therefore, that agencies like the Field Studies Council have been expressing concern at the decline in the extent of fieldwork carried out by schools (Tilling, 2005). The general view has been that this is predominantly a secondary school problem, consequent on the pressure of assessment and league tables; however, recent research also points out that young children may be missing out on imaginative play, because of curriculum targets, and recommends a need for more outdoor play and play spaces, to give children experience outside the home environment. The importance of this, the research stresses, is to help children learn to socialise (Rogers, 2005). But as many children are taken to school by car, and as parents often fear allowing their children even to play in parks close to home, tacitly encouraging them to play indoors on computer games, fewer opportunities for such outdoor social play exist. Amongst primary teachers, concerns may also be to do with health and safety, litigation or cost of transport.

These findings only serve to emphasise the importance of engaging children in out of classroom activities. Changes in curricula mentioned above are making flexible planning easier; and the findings of all the evaluations mentioned, including this, indicate that health and safety concerns are at the forefront of all agencies' planning for outdoor work, to the extent that some schools have actively chosen to involve themselves in activities such as 'Countryside Live!' because the planning is so meticulous, saving the schools much time and effort (Rickinson and Peacock, 2005). Some of the schools involved have already followed up this initiative with developments of their own, such as building an 'outdoor classroom' in the grounds of their school.

There are also many levels at which a school can engage its children in learning outside the classroom, from use and development of their school grounds, to simple ventures beyond the gates, such as 'welly walks'- perhaps the 'nature walk' is making a comeback!- to partnerships with one of the many environmental organisations in their locality or LEA. One important factor in ensuring impact, however, has been shown to be the involvement of 'expert' professionals who are not teachers from the school itself.

However, none of this will happen without the professional commitment of teachers in the school, and particularly the Head. Each one of the successful schemes mentioned above was powerfully supported by a head with commitment and fervour for environmental work. Funding and sponsorship was hardly ever raised as an issue. But this commitment was also dependent on the concomitant commitment of NT wardens, without which I doubt that the heads would have had the same zeal to continue the scheme.

There is also considerable evidence to suggest that heads saw and valued the profile the scheme gave them, within their community. It helped bring parents into school, made relationships between teachers, wardens and parents more relaxed, and made the community much more aware of what the school was achieving, not in academic terms but in terms of caring for the community environment. When a newspaper headline reads 'School leads the way in new environment partnership in the Park', people are bound to know something positive is happening.

But none of this will be fully sustained without the scheme, or at least something linked to it, continuing across the transition into high school. Whether the work is located in science, geography, history, citizenship, art or across several of these, teachers in secondary schools need first to be introduced to the idea as it works in practice in their community; and second to be shown how it could operate within the constraints of their context. The main recommendation, therefore, is that example 'pilot' schemes be presented, preferably by the existing participants themselves, to the head and staff of the relevant high school, to initiate discussion about ways forward. Ideally, this should be a scheme where a programme of school and property activity has been jointly planned and operated, and where options for continuity into the secondary school curriculum could be envisaged.

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8. Appendices

8.1 Background information on Follow-up students interviewed in schools

Table 8: Biodata on interviews carried out with GS pupils, present and past

School	Size & location	Age range participating in GS	Visiting pattern	Length of involvement	Current pupils interviewed	F/U students interviewed	Girls	Boys
St. Mary & St. Peter First	Small village, R-Y3	Y1-Y3	Alternate weeks (half-class groups)	5 years	Y2 x 8	Y5 x 5 Y6 x 3 Y7 x 7	5	10
Worksop Priory PS	Med./large urban, Y1-Y6	Y3-Y6	6 times per year	10+ years	-	Y9 x 5 Y10 x 4	4	5
Kilkhampton PS	Medium village, Y1-Y6	Y3-Y6	6 times per year	6 years	Y6 x 6	Y10 x 7	3	4
Lydford PS	Small village, Y1-Y6	Y5-Y6	Plan 8 visits per year	8 years	-	Y7 x 1 Y8 x 2 Y9 x 1 Y10 x 1 Y11 x 1 Y13 x 1	3	4
Leigham PS	Medium city, Y1-Y6	Y4-Y6	Alternate Fridays for 1 term	3 years	Y5 x 5	Y8 x 4	0	4
Lynton PS	Medium village, Y1-Y6	Y6	Alternate Fridays, summer term	8 years	Y6 x 12	3 (age 17-19)	2	1
Ambleside PS	Medium urban, Y1-Y6	Y1-Y6	6 times per year	4 years		Y7 x 4 Y8 x 2 Y9 x 2 Y10 x 1	7	2
Abbey School, Farnham	Special urban, All age		Alternate weeks	8 years		5 (age 15-16)	2	3
8					31	59	26	33

None of the schools had any significant minority ethnic representation.

8.2: Teachers interviewed

Table 9: Backgrounds of teachers involved in managing GS

St. Mary & St. Peter First	Class teacher, now in her 4 th year of involvement with the GS. Has a biology degree, and was trained via a SCITT scheme.
Worksop Priory PS	Involved continuously since 1995- has only missed 1 visit. Keen to develop environmental responsibility, cross-curricular links and a 'transition curriculum' with local high schools
Kilkhampton PS	Headteacher, involved throughout the scheme. Background in PE, Art and science teaching; Fulbright scholar who worked with North American Indians on their perception of environment.
Lydford PS	Headteacher, involved for 4 years since arriving at the school. Supports science learning dimension strongly.
Leigham PS	Science Advanced Skills Teacher, involved for 3 years. Places emphasis on social skills and confidence development, as well as curriculum reinforcement.
Lynton PS	Y6 teacher, keen to embed GS work in the school curriculum, but was satisfied that the scheme provides 'jaw-dropping experiences' for pupils.
Ambleside PS	Headteacher and maths specialist, involved for 4 years. Believes environmental education is hugely important, and is using GS to develop an 'Ambleside curriculum' based around it, from Y1-Y6.
Abbey School, Farnham	Teacher, involved in scheme for 4 years, KS4 Manager, reviewing and revising curriculum relevant to this programme

8.3 Interview schedules used

(a) LONG TERM IMPACT EVALUATION: STUDENT QUESTIONNAIRE

Background biodata

- At which school(s) were you, when you participated in the GS?
- In which year(s) of your schooling did you visit the NT property?
- Can you remember which teachers from your school were involved?
- Can you remember which NT wardens were involved?
- What subjects did you choose to study at GCSE, A level, or in HE?
- After you left this school, did you continue to visit NT sites?
- Are you, or have you or your family ever been, a member of the NT?
- (If yes: Can you say why you joined?)

Recollections of activities engaged in as part of the GS

- What do you recall from your time with the GS that gave you pleasure?
- What kinds of things do you remember doing at the NT property?
- What do you think you learned from these at the time?
- Which of these did you follow up afterwards in your work at school?
- Which of these, if any, inspired you to go on being involved?

Subsequent involvement in related activity

- After you left this school, did you become involved in any voluntary activity related to what you did as a Guardian?
- How much of this was in the community surrounding the school/property?
- What do you think was the impact of this (on school, property, or the NT)?
- Do you know anyone else from your school days who has become involved in any such organisations?
- Does your current work or study involve you in any similar activity?
- Which of these organisations have you heard of?¹³
- Have you ever been a member of any of these?
- Can you say why you joined, or why you chose not to join?

Attitude changes

- Do you read about environmental issues in the press or on TV?
- Can you give me an example of a recent article/programme that has made an impact on you?
- What kinds of things do you and your family do to conserve the environment?
- Can you give me examples of things that worry you concerning the environment?
- Can you give me examples of things you would like to change?
- What could you yourself do about such things?
- Are you likely to act in any of these ways?
- How would you explain the notion of 'Sustainability'?

¹³ RSPB, Greenpeace, Friends of the Earth, Wildlife Trust, BTCV, National Parks, SSSIs

(b) LTI EVALUATION: TEACHER QUESTIONNAIRE

Background biodata

1. When did your school first become involved with the GS
2. How many years have you personally been involved with the GS?
3. At which properties?
4. What is your specialism?
5. Have you undertaken any professional development that might have contributed to your interest in the GS?
6. Can you say why you did this?

Recollections of activities engaged in as part of the GS

1. How would you like the scheme to impact on pupils?
2. What do you think of as the most successful activities or aspects of your GS work?
3. To what extent do you think that the GS develops: (a lot, a little, not at all)
 - a. knowledge and understanding
 - b. skills
 - c. attitudes and values
 - d. enjoyment, inspiration and creativity
 - e. changes of behaviour?
4. How confident can you be about their learning of each of the above?
5. Were any aspects definitely unsuccessful?
6. What do you think your children have learned? (*link to GLOs in (3) above, where possible*)
7. How do you think the successful activities impacted on children, in practice?
8. For what proportion of children do you think the scheme makes a lasting impact?
9. Have there been any specific children for whom it has made a big difference?
10. What do you think were the key factors in bringing this about?
11. Can you give instances of where the GS has made an impact on a) the school, b) the property, c) the NT?

12. Attitude changes

13. What attitudes is the GS trying to develop in children?
14. In which of these do you think you are most successful?
15. What do you think are the key factors that make a GS scheme successful?
16. Which attitudes need to be developed if the GS is to make a lasting difference to young people as they grow and develop?
17. Are you optimistic that the impact of the scheme will improve, in the short and medium term? Why do you say this?

LTI EVALUATION: CONTACT DETAILS REQUESTED FROM SCHOOLS

Name of contact:

School:

Address:

Telephone:

e-mail contacts:

Length of involvement:

Property:

Next school(s) for LTI pupils:

Other potentially useful contacts:

8.4: Sample Introductory letter

To Whom It May Concern

Direct tel
Direct fax
E-mail
Your ref
Our ref

To Whom It May Concern:

This letter is to confirm that Alan Peacock, of The Innovation Centre, University of Exeter is carrying out a contract for research work on behalf of the National Trust over the period of November 2004 to July 2005.

I would be very grateful if you could spare the time to assist him in his research. He is looking into the long term impact of the Guardianship Scheme on pupils, teachers, communities and the National Trust.

We hope that the outcomes of this research will greatly assist us to improve the service we offer to schools and other groups in the future.

Thank you very much for your help, in advance.

Yours faithfully

Ann Nicol

Learning Adviser (Environment & Conservation)

8.5 How this study addressed the research objectives

In relation to the Trust's Research Objectives in establishing this study, the conclusions are as follows:

- Over 60 former students, 8 teachers and 8 wardens who had previously had a learning experience via one of 8 GS schemes were interviewed during January-July 2005.
- Biographical Information about the individuals such as age, gender, ethnicity and urban/rural background were collected in order to enable a fuller understanding of benefit accrued.
- The nature of the former GS learners' experiences was recorded by interview, and triangulated through use of other evidence from several different sources. Interviews focused on the former students' perceptions of the outcomes of the visit(s); these were categorised according to the Generic Learning Outcomes from MLA's *'Inspiring Learning for All'* framework, and compared with teachers' judgements of their learning.
- the tangible benefits of Guardianships with respect to pupils and ex-pupils, teachers, the wider "communities" involved, NT staff, NT volunteers, and the National Trust as an organisation, have been collated and described in sections 4 and 5 above.
- The indication is that the experience of involvement in the GS did lead to a developing concern to care for their environment. In about 10% of cases interviewed, there was also evidence of impact on future studies or a career path.
- Impact on the local community depended on the nature of school, community and property. Impact seemed to be most evident where these were 'compact' enough to enable a clear focus and integration of ongoing activity between school and property.
- A key to community impact was the way in which schemes were publicised; much more could be done at the properties themselves in this respect. In such compact schemes, students and their families were more likely to continue visiting the site and to become Trust members.
- From the above, a 'template' for the type of scheme most likely to have impact has been developed and is described in detail in section 5.1 above. This incorporates such criteria as: having a compact community and property; children's sustained engagement with the scheme from an early age; a wide range of learning objectives; taking full advantage of the specialist knowledge and roles of wardens and teachers; support from property staff other than wardens; clear lines of communication with other officers in cluster/region; provision of work experience opportunities on the property for secondary age pupils; effective publicising of Guardianship activity both in the community and at the property; and good liaison procedures between primary and secondary schools.
- information (and permissions) from sufficient participants to enable future contact to be made has been collected, and will be passed on when required in confidence to NT staff, for use in press stories, or to follow up on the stories for the purposes of future research.

8.6 Case Study 1

Case Study 1: G., age 19, Lynton

G. was involved with the GS whilst at Lynton primary school, and went on to Ilfracombe Community College, where he chose to do his work experience with the wardens at Watersmeet and West Exmoor during Year 10. This involved him in a range of practical conservation activities such as hedge laying and felling trees, both on the moor and the coast. I interviewed him along with two other former Lynton students and the warden, at Watersmeet, where he works temporarily in the NT café as a chef. He had recently completed 'A' levels, and applied to several South West universities to study Countryside Management.

G. has lived all his life in this community, which is quite isolated as a consequence of topography and poor transport facilities. In recent years the population has been subject to an inflow of both second-home owners and professional families who work from home. In everything he said, he showed that he took pride in the local area, and had become extremely knowledgeable about many aspects of environmental change. He clearly had considerable respect for and knowledge of the countryside in which he lived, saying that he 'feels privileged to live here'. Both the schools he attended, he said, had 'instilled important values'; he instanced self-discipline in particular as being important.

He also pointed to the benefits of having worked with and got to know the warden very well, to such an extent that they seemed very much a 'double act' as I talked to them. It was evident that one crucial role the GS had played was during his teenage years 'when young people usually don't want to know' about environmental issues. Working closely with the warden, strengthening their personal link, had sustained his interest throughout this period, and he mentioned the names of several other students (now studying out of the area, in most cases) for whom this had also been a significant factor.

G. was someone who preferred to be outdoors, and looked forward in future to a job with the NT. He pointed out how both his own and his friends attitudes had changed over the years through their contacts with the NT, in terms of the unacceptability of littering, for instance, instancing tourists as the worst offenders. He was keen to point out that young people 'should not see themselves as exceptions' to environmental obligations. He was also very knowledgeable about local issues including the historic salmon weir, its need for repair and the inadequacies of the Lynmouth sewage system which has been 'fixed' but which still does not work effectively. He went into considerable technical detail on both these issues, and about the benefits of the local recycling scheme. At the same time, G. was 'not convinced' about global warming, to which he had obviously given a good deal of thought; there were 'so many factors involved that it gets muddled'. He also talked about the problems with depletion of the ozone layer, and what he referred to as the 'New Zealand Hole'.

I asked about things that he thought needed to change: he referred first to local needs such as better roads (which are narrow and tortuous) and the question of an extra bridge at Barnstaple, which while necessary to relieve congestion, he explained, would also create damage to the nature reserve along the Taw estuary. But the issue he reverted to frequently was the 'high cost of tourism'. Car use and pollution was clearly increasing rapidly in the area, which put increasing pressure on the environment,

especially within the NT properties. He was adamant that he would one day 'return to the area to bring up my kids', whilst at the same time feeling strongly that families even in such communities should be restricted to a single car each.