

Project Design

Unlocking the Potential: Exploring the Archaeology of Suffolk's Aggregate Landscapes

An Outreach Project for Schools and Communities

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For
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1. Background

- 1.1 Suffolk's river valleys are, and have been for successive generations, a major source of sand and gravels, both in a regional and national context. Today there is significant and ongoing extraction at Flixton on the river Waveney, and at Cavenham and Worlington on the Lark. During 2006 the consultation for the new Minerals Plan (Specific Site Allocations DPD) for Suffolk was published and this has prompted both renewed interest in minerals planning and a heightened awareness of the interaction between extraction and archaeology. Some parts of the county, such as parts of the Gipping and the Lark, have been heavily pitted and virtually exhausted of accessible sand and gravel resources but there are others where there is a significant potential for future extraction. Within the 2006 plan are 25 new proposals. These cover a range of gravel locations and material, and include both extensions to existing quarries and significant new proposals. Demand for aggregates will remain high in the area with the significant planned developments in the Haven Gateway, Port of Felixstowe, and Ipswich waterfront regeneration, as well as that associated with the 2012 Olympics.
- 1.2 Within Suffolk, the coastal and lower estuarine areas of the Stour, Gipping, Deben, Alde and Ore are afforded some protection from extraction by their AONB status but this puts added pressure on the aggregate resources elsewhere in the county.
- 1.3 In England a huge corpus of research exists to demonstrate that gravel terraces were favoured areas for human activity from the earliest Palaeolithic times (Wymer 1999, Needham and Macklin 1992, Howard *et al* 2003)
- 1.4 It is widely recognised that Suffolk has rich and varied cultural resources related to its gravel terraces and extractive activities. There have been significant discoveries in advance of quarrying at places such as the multi-period landscapes at West Stow and Lackford Bridge on the Lark, and extensive prehistoric and Saxon remains from Coddendam and Flixton.
- 1.5 The legacy of gravel extraction and its role in shaping the landscape must also be recognised. The evidence for extraction is present throughout the county, and is now particularly important in conservation terms through the creation of reserves and habitat. Archaeology has also benefited in the wake of extensive extraction, for example, with the creation of Lackford Lakes Country Park, in an area of the river Lark, which is also home to the reconstructed Anglo-Saxon village and experimental archaeology centreat West Stow.
- 1.6 The ongoing threat to what remains of Suffolk's gravel terraces has encouraged Suffolk County Council's Archaeological Service to bid for grant aid to English Heritage, over the last few years, for a number of projects aimed at gaining a fuller understanding of the archaeological resource in the remaining aggregate areas to inform their recommendations to the Minerals Planning over the revision of the Minerals Plan and development control issues.
- 1.7 These projects have included publication and post excavation analysis of Flixton (Pnum 3544 and 2511) and Coddendam (2727), the publication of rescue archaeology from the 1960's and 70's, carried in advance of quarrying at Lackford Bridge (4770), near West Stow, a geo-archaeological study of the river valleys (4772) and an analysis of the historic environment resource in likely areas of future extraction(3987).
- 1.8 Whilst these specific projects are important in management terms, there has been little attempt to disseminate the results of this work and the role of archaeology and

extractive industries to the public. This proposal is an attempt to redress this balance, with an outreach project that is specifically designed to engage children of school age by using the results and evidence from archaeological digs in gravel quarries from Suffolk as the basis for practical activities. This project will use this archaeological legacy, combined with the resources of sites like West Stow, to deliver a project which is tied directly to learner-centred and curriculum-based objectives, but with a focus on aggregates and archaeology. .

2. Statement of potential

2.1 Introduction

- 2.1.1 This project design is a framework for a major community based, educational outreach initiative formulated around archaeology and the aggregates industry. It will draw in both the many strands of current archaeological investigations and the aggregates industry as well as bringing together a wider steering participation group. It will involve school and community groups from areas around the county of Suffolk where aggregates extraction has had a major impact on the landscape. Working with young people aged 7-15 it will deliver a series of exciting and innovative experimental archaeological events which will involve young people in practical and challenging activities where they will work together in designing and evaluating solutions to problems based upon archaeological evidence from Suffolk's river valleys.
- 2.1.2 The project will work with young people and their teachers on a series of practical activities both in schools and on location which will increase their understanding of their local environment in terms of its archaeology as well as giving information relating to aggregates extraction. Using these works as examples the project will develop a project website and designated area within SCC's education portal (Slamnet) to hold information about the project and an educational package of guidance and support materials designed for teachers, educational staff and young people.
- 2.1.3 The project will be managed and staffed by members of SCC Archaeological Service. The project designers have looked further afield for partner organisations to help deliver specific objectives and to seek professional advice. In particular, specialists have been approached to give advice on and deliver specific skills and knowledge on kiln technology, food history and wood working techniques.
- 2.1.4 In the preparation of this project design full consultation has taken place with the steering group and other interested parties, notably staff from participating schools, the Young Archaeologists Club and SCC Countryside Service in order to establish the need and worth of the proposed project. A full meeting of the steering group was not possible in view of the short time frame available but with English Heritage agreement consultation was carried out by phone, e-mail or by face to face meetings with individual steering groups. Furthermore, discussions have taken place with other successful ALSF outreach type projects and Alison Hamer from HWTMA has agreed to participate in the steering group and offered to add her expertise to the project on the basis of mutual co-operation. It is hoped that this will give additional value added benefits to both projects and organisations. Importantly, face to face meetings were arranged with those parties directly involved with the practical elements of the educational packages, in this case Suffolk Wildlife Trust and West Stow Anglo Saxon Village. The web manager from SCCAS Conservation team has also met with the project management team to discuss the relative merits of the alternatives for web site provision.
- 2.1.5 To manage the project, the field archaeology section has already been specifically seconded a member of staff for a full ten months. Duncan Allan is a teacher with 25 years experience in education, twelve as a headteacher. He is a qualified Ofsted inspector of schools with a clear understanding of the educational system and the needs and management priorities of schools. He has also run various outreach

projects for SCC Archaeological Service, including The Suffolk Garbology Project, supported by The Heritage Lottery Fund. (See Appendix 3). A project officer from the field team who is a qualified teacher, with experience in outreach work will assist him. This team member will assist in setting up and running the practical aspects of the experimental archaeology work as well as a proportion of the classroom-based sessions in primary schools. He is to be fully seconded for the time period specified in the project design (see Section 5)

2.2 Outcomes of Consultation Work

- 2.2.1 In all consultations, the proposed project was greeted with 100% support and enthusiasm with many asking what they could do to assist in bringing this ground-breaking project to fruition. Steering group members from the aggregates industry were keen to see positive messages delivered and welcomed the practical approach to the work.
- 2.2.2 Suffolk Wildlife Trust and West Stow Anglo-Saxon Village (steering group members involved directly in the experimental sessions and both providing venues for the events (4.5) demonstrated a real enthusiasm for the work. Both organisations see real outcomes for the young people involved and, more importantly, see definite longer-term benefits for their staff. Both parties are prepared to commit their educational staff to the project, as they see participation in the practical work as a way of delivering professional development that can subsequently be fed into their own educational programmes. The chance to work alongside other agencies was also welcomed and it is, therefore, intended that staff from both organisations work at each of the events to trade ideas and develop trust that will establish stronger working ties or the future. Discussions with other countryside agencies, notably SCC Countryside and Suffolk Coasts and Heaths Project, have indicated that they see this as a valued project and a good training opportunity for educational staff. To that end, these agencies have all been invited to attend the experimental events as observers. Furthermore, all these groups agree that support material in the form of downloadable resources and guidance would also be of great benefit and compliment the practical experiences of the project, enabling teachers to provide a valuable interactive experience for their pupils
- 2.2.3 Discussions with head teachers and curriculum co-ordinators further illustrated the enthusiasm for the proposed classroom-based activities (4.4). They see the outlined activities as a positive enhancement of their provision. The opportunity for teaching and support staff to work alongside experts in outreach provision and archaeology will not only benefit their children but also provide valuable professional development for history and cross-curricular learning (3.1). They also welcome the provision of support materials and extension activities on the schools portal (Slamnet) as being a valuable addition in the move towards '2020 Vision' (2.4.2), providing detailed guidance and relevant health and safety advice on practical work that can be undertaken by teaching staff.
- 2.2.4 The project manager has also approached staff from SCC Education Advisory Staff. In these discussions it was the initial intention to seek advice regarding the feasibility of the project. Such was their enthusiasm the humanities adviser and health and safety adviser have been added to the steering group and wish to be directly involved in the experimental work and to support the project in developing material for the Slamnet portal.

2.3 What the project will deliver

- 2.3.1 The project will deliver an integrated educational package for schools and young people in Suffolk and will be based upon clear and positive educational strategies. It will contain the following elements:-

- Practical experimental archaeology camps (with young people aged 12 –16) (Ref 4.5)
- Classroom based practical activities (targeting school groups aged 7-11) (Ref 4.4)
- Professional development for educational staff during practical sessions (both inside and outside the classroom) (Ref 4.3)
- Support materials for educational staff in Suffolk (developed from the practical work and designed to develop a lasting provision after the life of the project). All these materials will be available on Suffolk Education Slamnet Portal for teaching staff. This site contains a wide range of curriculum support materials and is the main source of support for teachers and teaching assistants in Suffolk). (Ref 4.3)
- Information web pages (housed within SCC Archaeological Service Website) (Ref 4.3)

2.3.2 The project's educational work for schools and young people in Suffolk will be based upon clear and positive educational strategies. The development of the project has been approached from the point of view of our audience, tailored to their requirements, rather than a product dictated specifically by the archaeological findings. It will focus upon young people but planning has also taken into account teachers, educational staff and volunteers. It will provide them with the practical experience to enable the running of similar projects for themselves as well as developing permanent resources and reference materials for future work. The project will introduce exciting and stimulating activities that are practical and challenging. The starting point for all of the activities will be to engage young people as active learners rather than empty vessels there to be trained and filled with facts. The authors believe that to adopt Stenhouse's criteria of engagement, collaboration, activeness and enquiry will allow for a broader and deeper, though more difficult to measure, understanding of the historic environment and their place within it. (Stenhouse 1976). We want these experiences to be, in Elaine Moss's vivid terms, 'free range' rather than 'battery' (ed. Styles 1992). These learning strategies are at the heart of '*The Teaching and Learning in 2020 Review Group*' commissioned by the government and now under discussion in schools. The report is intended to establish a clear vision of how teaching and learning will develop over the next 13 years and is a vision which the project will develop as a means of offering high quality experiences for the young people involved. Whilst not included within the project's Aims and Objectives the project sees the following skills and attitudes, taken from '*2020 Vision*', as underpinning the practical work. A synopsis of the report's recommendations is as follows,

That in engaging pupils

- Teaching must enthuse pupils and engage their interest in learning.
- Learners are active and curious.
- They are allowed to create their own hypotheses and ask their own questions.
- They are encouraged to coach one another
- They are able to experiment with ideas, safe in the knowledge that mistakes and being stuck are part of learning.
- Greater attempts are made by adults other than teachers to extend the range of skills and support for pupils

It is hoped that the emphasis on these skills and attitudes will make the work more relevant to the young people and staff involved and to those seeking help and information from the website and Slamnet portal.

The report also emphasises so-called 'Soft Skills', which will feature specifically within the projects aims and objectives despite, as the report points out, 'The National Curriculum giving them little weight nor requiring adequate measurement, recording or reporting.'

These 'Soft Skills' are listed as follows.

- Being able to communicate at a high level
- Reliability and perseverance
- Knowing how to work with others in a team.
- Knowing how to evaluate information critically
- Taking responsibility
- Being confident and able to investigate problems and find solutions.

See aims and objectives

2.3.3 The proposed project will also fulfil key ALSF priorities as stated by English Heritage (*See EH Website – Grants, Policy and Guidance-ALSF Priorities*) and as such will also feature within the projects specified aims and objectives, cross-referenced against the activities.

These priorities are to

- A1. Deliver to public and professional audiences the full benefits of knowledge gained through past work in advance of aggregates extraction.
- A2. Promote understanding of the conservation issues arising from the impacts of aggregates on the historic environment.
- A3. Offer training and professional development programmes to raise awareness of and promote best practise to industry, historic environment professionals and other steering group members.
- A4. Develop the analysis and dissemination of important data from past work in response to aggregate extraction.
- A5. Develop local education, outreach and community involvement, which raise awareness of conservation issues, communicates the knowledge gained through the extraction process and raises the profile of the positive benefits of extraction to communities living in current extraction areas.
- A6. Disseminate ALSF funded and other related work to Steering groups.
- A7. Deliver local education, interpretation, outreach and community involvement associated with past extraction, which raise awareness of conservation issues and communicates the knowledge gained through the extraction process.

In addition the following priorities are seen as important to the success of the project.

- A8. Provide a level of training to partner organisations that will allow the extension of similar outreach work beyond the life of the project.
- A9. Promote safe working practices in student based outdoor activities.

2.4 Working Partners

The following groups have been contacted, discussions held and collaboration agreed.

2.4.1 *Experimental Archaeology Work*

The project has identified and developed a partnership with a cluster of three High Schools (Claydon High School, Thurleston High School and Thomas Wolsey Special School) who are keen to work together on one or more of the experimental archaeology projects. Target groups, identified by the schools are 'talented and gifted' pupils for whom special provision is made within the school's curriculum; members of extra curricular history groups and, for Thomas Wolsey Special School, those pupils identified by their teaching staff as being able to benefit significantly from the project. Negotiations with schools and countryside agencies have identified dates and venues (see specific objectives 3.0) All these schools are adjacent to or within major gravel extraction areas, and pupils drawn from with communities who will have direct experiences of aggregate work.

Suffolk Wildlife Trust (a steering group member and contributor to the project) will provide staff and work alongside the archaeological service at a second experimental archaeology project. The target groups here will be SWT's youth action group '*The*

Wild Bunch and the Bury St. Edmunds Young Archaeologists Club (YAC) group. Consultation with each of these organisations has indicated keen interest and enthusiasm. Dates and venues have likewise been identified. Members of these organisations are drawn from throughout the county

A third experimental archaeology week has been booked during August, to take place with West Stow Anglo Saxon Village acting as host. Staff here will identify a target group from the area from their own contact network. This is a consortium from participating, schools and youth groups with which they work. The village and country park are located within a former gravel quarry and the catchment area for this activity is designed to attract people from an area with a history of extensive aggregates winning.

2.4.2 *Classroom-based sessions*

Individual sessions have yet to be booked for this element of the project although consultation with eligible schools indicates that available sessions will be easily filled. This will be a primary task on successful completion of the PD stage (see Task 4a).

2.4.3 *Web Pages*

In developing materials for the web pages and schools portal (Slamnet) the project manager will work in consultation with SCC Education's advisory teacher for Humanities, Dale Banham, and the website manager Anna West to ensure all materials meet the levels of quality and usefulness demanded by the education service.

2.4.4 *Film Work*

A film company has been approached to work with the project. Discussions have centred on the production of two educational film packages. These will be posted on the web site to support teachers and young people in developing similar projects. On successful completion of the PD the final format and outcome will be formalised.

3. Aims and objectives of the project

OVERALL AIMS OF THE PROJECT

- A.i To engage and excite a range of young people in their heritage.
- A.ii To develop the interest and knowledge of young people in their local area with -specific attention to river valleys.
- A.iii To use archaeological evidence from Suffolk's river valleys to experiment with and experience ancient technology as a means to better understand and appreciate life in the past.
- A.iv To work within a former gravel working site as a means of raising awareness of gravel extraction and the re-instatement of the site as a reserve for conservation and leisure.
- A.v To work, co-operate and socialise with a range of adults and peers.
- A.vi To provide a cross curriculum training package for all schools, educational centres and stake holders.

Specific objectives for the project

3. Aims and objectives

3.1 SCHOOL VISITS– CLASSROOM SESSIONS

Overall aims of the project A.i to A.vi covered

Participants: 40 classes from River valley area; Primary Schools, Key Stage 2 (1/2 day session) – approximately 30 young people in a class.

Specific Objectives:

- To understand the work of the aggregate industry
- To appreciate how former quarry sites can be transformed in to wildlife reserves and recreational areas
- To understand the purpose of archaeology and the archaeological process
- To appreciate the archaeology of Suffolk river valleys
- To be able to recognise what constitutes archaeology evidence
- Develop hypothesis about the make, age and function of given artefacts
- Discuss what each artefact tells them about the past

PRACTICAL SESSION

Specific Objectives:

- Know the basic health and safety, hazards and risks when working in a practical situation
- To sort various artefacts against agreed criteria
- Research, identify and date their findings
- Produce visual evidence via modern technology
- Compare results with classmates
- Group discussion and evaluation
- To participate in small group

Areas of Curriculum Covered See Appendix 4	
KS2 PSHE/1bce 2fj 3g 4a 5b 5f	
EH A2,A3 EH A5,A7 KS2 GEOG 1a 2acd 3de 4b 5ab KS2 HIS/1	
KS2 HIS/1	
KS2 En1/1a,b,d,e,f KS2 En1/2c,d,e,f	
VS4 VS2 VS4 KS2 HIS/1 VS5 EH A8,A9 VS6 VS1 KS2 HIS/4b VS3 KS2 PSHE/4a,b,c,d,e,f KS2 En1/1a,b,d,e,f KS2 En1/2c,d,e,f	

3.2 EXPERIMENTAL ARCHAEOLOGY CAMPS - LACKFORD LAKES 31.07.07 – 04.08.07

Overall aims for the project A.i to A.vi covered.

Participants: Youth group from the Suffolk Wildlife Trust (The Wild Bunch) and YAC. 40 young people

POTTERY MANUFACTURE

Specific Objectives:

- Know the basic health and safety requirements of Lackford Lakes
- Be aware of their roles and responsibilities with regard to health and safety
- Know the roles and responsibilities of all participants
- Evaluate evidence of Roman pottery manufacture within the River valleys
- Understand Roman pottery manufacture
- Produce a Roman type pot
- Build a Roman type kiln and fire their pots
- Evaluate the success of their pot making against Roman examples
- Produce visual evidence via modern technology

SHELTER BUILDING

Specific Objectives:

- Know the basic health and safety requirements
- Evaluate evidence of shelters discovered within the river valleys
- Work in teams to negotiate, design and build a weather proof shelter for the group
- Evaluate, review and modify shelters
- Working in teams test comfort level and durability by living in the shelter. Experiment with different materials and evaluate suitability
- Produce visual evidence via modern technology

Areas Of Curriculum Covered See Appendix 4

KS3 PSHE/4a,b,c,d,e,f
KS3 CIT/3b,c
KS3 ENG 1ae 2abdf 3abde
EH A8,A9

KS3 PE/11a,c
KS3 HIS/1 VS4, VS5
KS3 HIS/4b
EH A2,A4,A5,A7
KS3 HIS/3a
VS1,2,3,4,5,6
KS3 DT/3b VS2, VS4
KS3 HIS/3b

KS3 PSHE/4b,c,d,e,f
KS3 CIT/3b,c
EH A4,A5,A7,A8,A9
VS4, VS6
KS3 DT/1a,b,c,d,e,f VS4
KS3 DT/2a,b,c VS1,VS3
KS3 PE/11a,c VS2,VS5
KS3 DT/3a,b
KS3 En1/1a,b,d,e,f

3.2 EXPERIMENTAL ARCHAEOLOGY CAMPS - LACKFORD LAKES 31.07.07 – 04.08.07 *Continued*

FOOD PROCESSING

Specific Objectives:

- Know the basic health and safety, hazards and risks associated with food processing
- Evaluate the evidence of bone remains, cereal residues, pot residues and cutting tools available from the river valleys
- Compile a menu based on findings
- Experiment with ancient food types and methods of cookery to produce an edible meal
- Modify recipe after organoleptic testing
- Produce and eat a meal for their team members
- Produce organoleptic evaluation
- Produce visual evidence via modern technology

FLINT KNAPPING

Specific Objectives:

- Know the basic health and safety required for flint knapping
- Be able to recognise worked flint
- Be able to appreciate the precision and skill required to work flint
- To recognise the range of uses to which worked flint was utilized
- To work with an experienced flint knapper in producing a range of tools
- To test and evaluate their efficiency against modern alternatives
- Produce visual evidence via modern technology

Areas Of Curriculum Covered See Appendix 4

KS3 PSHE/4b,c,d,e,f

KS3 CIT/3b,c

EH A8,A9

EH A1,A2,A5,A7

VS4

KS3 HIS/3a,b

VS5

KS3 DT/2a,b,c

VS6

KS3 DT/3a,b

VS3, VS6

VS1, VS5

KS3 En1/3a,b,c

VS4

EH A8

KS3 PSHE/4a,b,c,d,e,f

KS3 CIT/3b,c

KS3 HIS/

EH A8,A9

VS1, VS3

KS3 EN1/2c,d,e,f

VS2, VS4, VS5

KS3 DT/3b

EH A8

3.3 EXPERIMENTAL ARCHAEOLOGY CAMPS - WEST STOW 20.08.07-25.08.07

Overall aims for the project A.i to A.vi covered.

Participants: Youth group from Bury St Edmunds area of mixed ability young people. 40 young people

POTTERY MANUFACTURE

Specific Objectives:

- Know the basic health and safety requirements of West Stow
- Be aware of their roles and responsibilities with regard to health and safety
- Know the roles and responsibilities of all participants
- Evaluate evidence of Saxon pottery manufacture within the river valleys
- Understand Saxon pottery manufacturing methods
- Produce a Saxon type pot
- Build a Saxon type clamp kiln and fire their pots
- Evaluate the success of their pot making against Saxon examples
- Produce visual evidence via modern technology

SHELTER BUILDING

Specific Objectives:

- Know the basic health and safety requirements
- Evaluate evidence of Saxon shelters discovered within the river valleys
- Work in teams to negotiate, design and build a weather proof shelter for the group
- Evaluate, review and modify shelters
- Working in teams test comfort level and durability by living in the shelter. Experiment with different materials and evaluate suitability
- Appreciate the characteristics of different materials
- Produce visual evidence via modern technology

Areas Of Curriculum Covered See Appendix 4

KS3 ENG 1ae 2abdf 3abde

KS3 PSHE/4a,b,c,d,e,f

KS3 CIT/3b,c

EH A8,A9

KS3 PE/11a,c

KS3 HIS/1 VS4, VS5

KS3 HIS/4b

EH A2,A4,A5,A7

KS3 HIS/3a

VS1,2,3,4,5,6

KS3 DT/3b VS2, VS4

KS3 HIS/3b

KS3 PSHE/4b,c,d,e,f

KS3 CIT/3b,c

EH A4,A5,A7,A8,A9

VS4, VS6

KS3 DT/1a,b,c,d,e,f VS4

KS3 DT/2a,b,c VS1,VS3

KS3 PE/11a,c VS2,VS5

KS3 DT/3a,b

KS3 En1/1a,b,d,e,f

VS1,VS3,VS6

EH A8

3.3 EXPERIMENTAL ARCHAEOLOGY CAMPS - WEST STOW 20.08.07-25.08.07 *Continued*

FOOD PROCESSING

Specific Objectives:

- Know the basic health and safety, hazards and risks associated with food processing
- Evaluate the evidence of bone remains, cereal residues, pot residues and cutting tools available from the River valleys
- Compile a menu based on findings
- Experiment with ancient food types and methods of cookery to produce an edible meal
- Modify recipe after organoleptic testing
- Produce and eat a meal for their team members
- Experiment with Saxon recipes
- Produce organoleptic evaluation
- Produce visual evidence via modern technology

SAUNA OR COOKING PITS

Specific Objectives:

- Understand the health and safety implications of cooking pits and sauna
- Evaluate the evidence of fire cracked flint and related structure from River valley areas
- Negotiate, decide and take responsibility of the design of their cooking pit or sauna
- Test and evaluate opposing archaeological hypothesis
- Evaluate results
- Produce visual evidence via modern technology
- Produce a video record of their findings to be used as a discussion topic for website

Areas Of Curriculum Covered See Appendix 4

KS3 PSHE/4b,c,d,e,f
KS3 CIT/3b,c
EH A8,A9
EH A1,A2,A5,A7 VS4
KS3 HIS/3a,b VS5
KS3 DT/2a,b,c VS6
KS3 DT/3a,b VS3, VS6
VS1, VS5
KS3 En1/3a,b,c VS4
EH A8

KS3 PSHE/4b,c,d,e,f
KS3 CIT/3b,c
EH A8,A9
KS3 DT/3b
KS3 DT/1b,d VS1,VS3
KS3 DT/2a
KS3 DT/3b
VS2,VS4,VS5
EH A8

3.4 EXPERIMENTAL ARCHAEOLOGY CAMPS - REDE WOOD September 2007

Overall aims of the project A.i to A.vi covered.

Participants: Claydon High School, Thurleston High School and Thomas Wolsey Special School. 75 young people

WORKING WITH WOOD

Specific Objectives:

- Know the basic health and safety, hazards and risks when working with wood
- Working in small teams be able to recognise the characteristics of different green wood types
- Know the range of tools suitable for working with green wood
- Understand how to care for and use the tools
- Experiment with different wood types, tools and techniques
- Produce a range of products
- Evaluate the serviceability of products produced.
- Produce visual evidence via modern technology

POTTERY MANUFACTURE

Specific Objectives:

- Know the basic health and safety requirements of West Stow
- Be aware of their roles and responsibilities with regard to health and safety
- Know the roles and responsibilities of all participants
- Evaluate evidence of Saxon pottery manufacture within the river valleys
- Understand Saxon pottery manufacturing methods
- Produce a Saxon type pot
- Build a Saxon type clamp kiln and fire their pots
- Evaluate the success of their pot making against Saxon examples
- Produce visual evidence via modern technology

Areas Of Curriculum Covered See Appendix 4

KS3 ENG 1ae 2abdf 3abde

KS3 PSHE/4a,b,c,d,e,f

KS3 CIT/3b,c

EH A7,A9

VS1

VS3

VS2

VS5, VS6

VS4

VS4

KS3 DT/2a

KS3 DT/3b

EH A8

KS3 PSHE/4a,b,c,d,e,f

KS3 CIT/3b,c

EH A8,A9

KS3 PE/11a,c

KS3 HIS/1 VS4, VS5

KS3 HIS/4b

EH A2,A4,A5,A7

KS3 HIS/3a

VS1,2,3,4,5,6

KS3 DT/3b VS2, VS4

KS3 HIS/3b

3.4 EXPERIMENTAL ARCHAEOLOGY CAMPS - REDE WOOD September 2007 *Continued*

SHELTER BUILDING

Specific Objectives:

- Know the basic health and safety requirements
- Evaluate evidence of Saxon shelters discovered within the River valleys
- Work in teams to negotiate, design and build a weather proof shelter for the group
- Evaluate, review and modify shelters
- Working in teams test comfort level and durability by living in the shelter experiment with different materials and evaluate suitability
- Appreciate the characteristics of different materials
- Produce visual evidence via modern technology

FOOD PROCESSING

Specific Objectives:

- Know the basic health and safety, hazards and risks associated with food processing
- Evaluate the evidence of bone remains, cereal residues, pot residues and cutting tools available from the river valleys
- Compile a menu based on findings
- Experiment with ancient food types and methods of cookery to produce an edible meal
- Modify recipe after organoleptic testing
- Produce and eat a meal for their team members
- Experiment with Saxon recipes
- Produce organoleptic evaluation
- Produce visual evidence via modern technology

Areas Of Curriculum Covered See Appendix 4

KS3 PSHE/4b,c,d,e,f

KS3 CIT/3b,c

EH A4,A5,A7,A8,A9

VS4, VS6

KS3 DT/1a,b,c,d,e,f

VS4

KS3 DT/2a,b,c

VS1,VS3

KS3 PE/11a,c

VS2,VS5

KS3 DT/3a,b

KS3 En1/1a,b,d,e,f

VS1,VS3,VS6

EH A8

KS3 PSHE/4b,c,d,e,f

KS3 CIT/3b,c

EH A8,A9

EH A1,A2,A5,A7

VS4

KS3 HIS/3a,b

VS5

KS3 DT/2a,b,c

VS6

KS3 DT/3a,b

VS3, VS6

VS1, VS5

KS3 En1/3a,b,c

VS4

EH A8

3.4 EXPERIMENTAL ARCHAEOLOGY CAMPS - REDE WOOD September 2007 *Continued*

SAUNA OR COOKING PITS

Specific Objectives:

- Understand the health and safety implications of cooking pits and sauna
- Evaluate the evidence of fire cracked flint and related structure from river valley areas
- Negotiate, decide and take responsibility of the design of their cooking pit or sauna
- Test and evaluate opposing archaeological hypothesis
- Evaluate results
- Produce visual evidence via modern technology
- Produce a video record of their findings to be used as a discussion topic for website

FLINT KNAPPING

Specific Objectives:

- Know the basic health and safety required for flint knapping
- Be able to recognise worked flint
- Be able to appreciate the precision and skill required to work flint
- To recognise the range of uses to which worked flint was utilized
- To work with an experienced flint knapper in producing a range of tools
- To test and evaluate their efficiency against modern alternatives
- Produce visual evidence via modern technology

Areas Of Curriculum Covered See Appendix 4

KS3 PSHE/4b,c,d,e,f

KS3 CIT/3b,c

EH A8,A9

KS3 DT/3b

KS3 DT/1b,d VS1,VS3

KS3 DT/2a

KS3 DT/3b

VS2,VS4,VS5

EH A8

KS3 PSHE/4a,b,c,d,e,f

KS3 CIT/3b,c

KS3 HIS/

EH A8,A9

VS1, VS3

KS3 EN1/2c,d,e,f

VS2, VS4, VS5

KS3 DT/3b

EH A8

3.5 WEBSITE/VIDEO PACKAGE

Overall aims of project A.i to A.vi covered

Specific Objectives:

- To promote an awareness and understanding of aggregates industry
- To promote an appreciation of the richness of archaeological evidence within the River valleys environment
- To provide a training resource for school, steering groups and countryside agencies
- Produce a cross circular teaching resource for school and community groups
- To give young people from partner schools and group the opportunity to work with professional film makers
- Provide visual evidence of all ability age groups working together to achieve common goals
- To encourage partnership working within schools through interactive communications of best practice
- Provide links to other websites in order to increase awareness of educational resources available and vice versa

Areas Of Curriculum Covered See Appendix 4

KS3 GEOG 1f 2bc 3cd 5ab

EH A1,A2

EH A3,A4

KS3 PSHE 1abc 2fh 3bcdhijk 4a-f

KS3 ICT 3a 5b

EH A5,A6

EH A7,A8

EH A9

KS3 DT/2a

VS1 2 3 4 5 6

3.6 Value Added

3.6.1 In addition to the core objectives it is envisaged that the legacy of the project will:

- Provide a core of outreach experience and educational staff training in the practical aspects of experimental archaeology. The staff will represent a range of organisations within the county [SCCAS, SWT, SCC, Countryside, West Stow Anglo-Saxon village, teaching staff from partner schools] and will thus be in a position to influence a wide and diverse audience by:
 - acting as consultants to schools and community groups
 - continuing to develop the activities within their own organisations
- Leave kiln structures on site for future firings
- Provide a range of teaching materials, lesson plans and training packaged to be placed on the SCC Education Portal [Slamnet] and SCCAS web pages. * see sec for full details
- Provide a trained web manager for SCAAS
- Post a copy of the project design, final report and documentary video on the web pages for the benefit of other agencies.
- Provide advantageous publicity for organisations concerned through the promotion of the project and its sponsors
- Promote greater awareness of historic environment issues and the value of the historic environment among partners and steering groups
- Provide the potential to explore with partner organisations, additional funding streams, perhaps related to the future sponsorship of a particular aspect of the project.

4. Methodology

4.1 Project Management

Task 1 Project Management

The day to day running of the project will be the responsibility of the Project Manager, Duncan Allan. He will ensure that the timetable and task list is adhered to and targets are met. Any changes to the programme are his responsibility and he will ensure all variations are reported back to the steering group and to English Heritage for agreement. The project manager will act as the link between the various steering group members, with responsibility for chairing meetings and setting meeting agendas. He will also head up the team analysing the project outcomes and be responsible for producing the evaluation report at the end of the project.

- 4.1.1 Additional input on management issues will be available from Keith Wade (SCCAS manager) and William Fletcher (HECA) over the full term of the project as required. This is considered good practice, to ensure that sound curatorial input can be given, firm budgetary control can be delivered and that liaison with elected members of both County and District Councils at a senior level are kept informed
- 4.1.2 Regular monitoring of the project will be undertaken in conjunction with the steering group (4 meetings) to ensure that all the project aims are fulfilled by the end of the proposed programme.

4.2 Steering group

Task 2 Establishing a Steering group

- 4.2.1 A steering group has been set up in advance of the project in order to provide a multi-disciplinary approach to the project and ensure that the many disparate organisations involved have a forum where opinions can be expressed and where, if necessary, compromises can be agreed. The steering group members (4.2.5) have been selected to represent archaeologists (local and national), wildlife and conservation groups, the aggregates industry (planners and commercial operators), education advisers. All steering groups are to a degree interrelated - all are committed to sustainability and all have a mutual interest in promoting the interests of their organisations in a positive light. In addition, all the steering group members are aware that they can best promote their activities through joint working arrangements with other community-based interest groups.
- 4.2.2 A total of 4 full meetings of the steering group are planned over the course of the project. The Project Manager will be responsible for chairing the meetings and for producing draft agendas. The Suffolk County Council Archaeological Service will provide a minuting secretary.
 - 4.2.2.1 The first meeting aims to introduce the project to the steering group members in more depth. Steering group members will have the opportunity to clarify their particular areas of expertise and the contribution that they can make to the project. The meeting will also provide Steering groups with the opportunity to define just what they expect the project to achieve for their own interest group, and make recommendations for the content of the project website. Subject to approval of the project design within the currently proposed timetable, the date of the first meeting has been provisionally set for the third week in June.

The second and third meetings will be scheduled to take place during two of the proposed experimental archaeology sessions and will be held on site. The meetings will allow steering group members to view at first hand the project as it progresses and give these groups the opportunity to ensure that their interests are being represented. These meetings will allow steering group members to mutually agree a strategy for publicising the project.

The final meeting will form a part of the project review process and will aim to identify strengths and weaknesses in the project, based on both the personal input of steering group members and evidence gained from the evaluation sheets (Task 8a). Feedback from the steering group meeting is anticipated as constituting a key element in the project evaluation report (Task 8b).

4.2.3 Further smaller meetings are envisaged between selected partner organisations, which will need to be agreed during the lifetime of the project. Such meetings will be particularly relevant to those in the Steering Group involved directly in the organisation of practical events.

4.2.4 The Steering Group will comprise:

SCCAS Outreach Officer – Duncan Allan. (Chairman)
SCCAS Conservation team – Jude Plouviez, William Fletcher
Quarry Products Agency Representative (QPA) - Alan Everard
SCC Environment & Transport, Minerals section – Viv Codd
SCC Education, Advisory Teacher for Humanities - Dale Banham
SCC Health & Safety Manager – Nick Wilding or SCC Outdoor Education Adviser (Health & Safety) – Martin Hore
St. Edmundsbury B C, West Stow Anglo-Saxon village – Rachel Ballantyne or Mary Ellen Crothers
University of Birmingham – Ben Geary
Suffolk Wildlife Trust – Judy Powell
English Heritage – Dan Aukett
Hants & Wight Trust for Maritime Arch – Alison Haymer

4.2.5 A number of Steering Group members have provided the names of substitutes should the named person be unable to attend any of the planned meetings. The County Archaeological Service will keep its press office informed as the project develops and other steering group members will be encouraged to do the same if they feel that to be appropriate.

Task 2a Set agenda for first Steering Group meeting and confirm date, time and venue.

Task 2b Agree arrangements for further meetings (as appropriate to the requirements of the Steering group)

4.3 Project Website

Task 3 To create a project website

4.3.1 The project will develop and manage a set of web pages to provide information about the project to the general public, education staff and students. It will provide a range of teaching resources for teachers and educational staff via a link to SCC education portal. The site will be hosted by Suffolk County Council.

It will include:

- A summary of the aims of the project.
- Information on the work of individual Steering groups.
- How the Steering groups work together.
- News items on events eg. educational work, open days, school visits.
- Publicity of events and open days.
- A documentary film of work undertaken.
- Links to other useful sites eg partner organisations
- Information on other ALSF projects locally and nationally.
- The project plan and final report

4.3.2 The site will also be linked to Slamnet, SCC portal for teachers. This is a designated site for all teaching staff and assistants in Suffolk and is their central resource for teaching packages and support materials.

The project will develop an education package to be posted on this site, developed by the project manager and the web site manager. A member of the Archaeological Service will be seconded to the project and be responsible for the developing and managing of the site through the life of the project and beyond, thus ensuring this becomes a sustainable resource available to the target audience.

The secondment of a member of staff with an archaeological background is seen as important to the success of this element of the project. A 'feel' for archaeology, specific knowledge about relevant sites and the ability to research will deliver better outcomes than outsourcing development. The authors want the designer to have the freedom to develop and innovate as the project evolves. The training and experience gained from the project will be a valuable asset to both the seconded staff member and the Archaeological Service.

The education package will evolve from the classroom visits (4.4) and will include

- Lesson plans and resources to support primary school pupils at KS2 (See specific objectives 3.1). These activities can be carried out in the classroom and will introduce children to the richness of the archaeological evidence within the river valleys environment, develop their chronological understanding, historical interpretation and historical enquiry.
- A package to encourage and support teachers and outreach workers in developing adventurous activities.

This will include:-

- The documentary film and staff training resource detailed in (4.7)
- Maps, photographs and information on sites within the river valleys.
- Lesson plans to support the videos
- ID charts and information sheets to give more details on kilns and pottery manufacture, shelter building, food technology etc.
- Links to useful educational sites eg. Wessex and CAT.
- Information on other outreach work offered by the Archaeological Service.

4.3.3 Anna West has been designated web-site manager for the project, and it is intended that she should, in due course, take over the maintenance of the whole Archaeological Service website, as part of her continuous professional development, from the current manager, Jude Plouviez. Training in web design will be given in-house by Customer Service Direct (CSD), who provide Suffolk County Council's support services (IT, HR and Finance), and will take 3 days to complete. Jude Plouviez will be in a position to advise and mentor the new manager until such time as she is suitably confident to take over in the role.

<i>Task 3a</i>	<i>Train a member of archaeological service as web designer web service manager</i>
<i>Task 3b</i>	<i>Consult with SCC Advisory Teacher for Humanities (Dale Banham)</i>
<i>Task 3c</i>	<i>Consult with steering group.</i>
<i>Task 3d</i>	<i>Begin design of website.</i>
<i>Task 3e</i>	<i>Roll out website at the end of June 2007</i>
<i>Task 3f</i>	<i>Update website with new material and news/publicity on a monthly basis.</i>
<i>Task 3g</i>	<i>Develop new materials and additional information</i>
<i>Task 3h</i>	<i>Add documentary film and training package to slamnet portal by Jan 08</i>

4.4 Educational Package

Task 4 To develop an educational package including provision for school visits

4.4.1 This element of the project will deliver a series of exciting and practical activities linked with the archaeology of the river valleys to classes of 7-11year olds (Key Stage

2) in Suffolk. These will be school based with contact time for each class lasting for half a day. See specific objectives (4.4)

4.4.2 Scope

Initially the project will invite participation from schools within the project's defined area of study (Gipping, Waveney and Lark Valleys). Consultation has taken place with several schools in the river valleys area to gauge enthusiasm and should funding become available these sessions will prove popular. For the pupils involved this will

- Increase their understanding of their local environment in terms of its archaeology.
- Give information relating to aggregates extraction.

For teaching staff and assistants it will

- Introduce them to the archaeology of their local area
- Provide opportunities to develop the work further through access to teaching resources posted on SCC education portal (Slamnet)

The project will accept bookings from up to 20 schools with a target audience of 1000 pupils and 80 teaching staff and assistants

4.4.4 Outline to the Programme

The HLF Garbology Project was developed in Suffolk and was innovative in its use of archaeology to introduce young people to waste reduction issues. A copy of the final report of the project is included as an appendix to this document (Appendix 3)

This project aims to build upon the expertise gained from running the classroom sessions within the Garbology project and develop them as a suitable means of delivering the objectives of this current project.

4.4.5 Content

- Introductory session using photographs/video footage from our archive to introduce:-
 - The work of the aggregates industry.
 - The regeneration of quarry sites as reserves for flora and fauna.
 - An understanding of the purpose of archaeology.
 - A basic understanding of the archaeological process.
 - An introduction to the archaeology of Suffolk's river valleys.
 - An introduction to the reading of evidence from artefacts discovered within the river valleys.
- A handling session using multi-period artefacts from the SCCAS collection to:-
 - Allow pupils to touch, examine and recognise what constitutes archaeological evidence.
 - Develop hypotheses about the make up, age and function of the artefacts.
 - Discuss what each artefact tells them about the past.
- A practical session using sieves, crates and buckets of soil containing single period artefacts from one of four periods familiar to primary aged children.
 - During this session the children will use trowels, brushes and sieves to recover artefacts from the soil and sort them against agreed criteria, for example evidence of food; evidence of buildings; evidence of domestic life.
 - Research and identify their finds using resources such as photographic evidence.
 - Use the evidence from research to date their finds within one of the four given periods using a time line to develop and consolidate ideas of chronology.
- A plenary session to:-
 - compare results with classmates.
 - ask questions arising from the day.

4.4.6 Educational benefits of the school visits

The planned visits to schools will be using a tested formula first developed within Suffolk's Garbology Project.

This project was particularly successful in engaging young people of all abilities and social and ethnic backgrounds. It was found that children with learning difficulties such as behaviour and language, who were often withdrawn or disruptive, became focussed, animated and completely engaged in their tasks. In schools with a range of ethnic backgrounds the picture was the same.

Although children, like many adults, can find it difficult to relate to Roman or Saxon culture, an awareness that all around them are things to be discovered and stories to be told is something that all children can relate to. Staff and parents also become very involved in the work and where parents and their children are involved in the same session this can be the beginning of a common interest that can be shared. It is the ability to excite the imagination about the past that will make the sessions successful.

4.4.7 For teaching staff the visits give their pupils opportunities difficult to replicate within the school curriculum. The sessions are designed to address areas of the History curriculum that teachers find difficult, such as working from primary sources. It will also develop cross-curricular links such as, Technology, PSHE/Citizenship and Geography.

Most importantly it gives pupils the chance to talk; to discuss, reason and enthuse about what they are doing, areas at the forefront of educational development at present. (See specific objectives 3.1 – 3.5)

4.4.8 These sessions will also provide professional development opportunities for staff. As well as working alongside a specialist in archaeology, there will also be opportunities for discussion and planning on how the work can be further developed. Teaching resources, available on the project's website will be introduced and staff meetings offered to the school following a visit.

4.4.9 Feedback from staff and children involved in similar sessions has been unanimously supportive. In general teachers found that the sessions were:

- very well organised and were just at the right level for their pupils
- particularly good because they allowed pupils to see, touch and discuss.
- a good stimulus for further work in the classroom.

And that:

- the staff, as well as their pupils, were inspired and learnt a great deal
- the sessions were good for the pupils because they were 'hands-on'
- cross curricular thinking skills were encouraged
- the project inspired discussions and follow-up work.

Some of the comments made by teachers included 'A rich learning experience', 'Memorable', 'Fabulous sessions', 'Just what primary education demands' and 'An excellent day'

4.4.10 During these visits the group will also work alongside our filmmakers in recording the experiences for inclusion on the website and as promotional footage for the project steering group members.

4.4.11 To adequately evaluate its success, it is vital that both clients and steering group members provide feedback through evaluation forms and that the data collected is evaluated regularly. Feedback from both staff and children will be used to refine the on-line resource packs on offer through the website and used as a data source for the evaluation report (Task 8b).

Task 4a Contact targeted schools with details of project and an invitation to book visits.

Task 4b Develop lesson plans, educational package and CD of appropriate images relating to:-

- *Aggregates industry.*
- *Flora and fauna*

- *Archaeology of the river valleys*
- Task 4c *Check, re-instate equipment from Garbology Project.*
- Task 4d *Develop evaluation form for feedback on effectiveness of sessions*
- Task 4e *Confirm dates with schools.*
- Task 4f *Provide copies of risk assessment: - already in place*
- Task 4g *Deliver package to schools*
- Task 4h *Process feedback from visited schools*

4.5 Experimental Archaeology Projects

Task 5- To establish three experimental archaeology events

4.5.1 The project design identifies 4 target groups for involvement in 3 separate experimental archaeology projects. The 3 projects will take place on sites within areas of gravel extraction, namely The Gipping Valley north of Ipswich and the Lark Valley to the west of Bury St Edmunds. The four target groups of young people aged 11-15 are also based within these geographical areas.

4.5.2 Groups and venues are as follows:

Date	Venue	Participating Groups
31.07.07 – 04.08.07	Lackford Lakes SWT Reserve	SWT Action Group (The Wild Bunch YAC Bury St. Edmunds
20.08.07 – 25.08.07	West Stow Anglo Saxon Village	West Stow youth group
10.09.07 – 12.09.07 24.09.07 - 27.09.07	Rede Wood Nature Reserve near Ipswich	Claydon High School Thurleston High School Thomas Wolsey Special School

4.5.3 Visits have been made to each of the sites to assess their suitability and to discuss the needs of the project with the site managers, two of whom are steering group members. Dates for the events have been booked with site managers.

4.5.4 All of the organisations involved are signed up to take part in the project with the exception of the West Stow Anglo-Saxon village group. Education staff from this site are in discussion with 3 local youth groups with whom they have worked with in the past and we expect final confirmation by the end of April.

4.5.5 The project plans to use the expertise of three steering group members listed above in delivering a series of activities, which will offer participants the opportunity to work co-operatively in an outdoor environment. It will deliver a range of curricular experiences in history, geography, science, technology and mathematics. Students will be encouraged to discuss, reason and test hypotheses, acquiring new language skills and developing their skills in patience, tolerance and compromise.

- SCC Archaeological Service will co-ordinate the events, provide the archive from which to work as well as two staff members who are also trained teachers with considerable experience of delivering outreach work to schools and youth groups within the county (HLF projects at Leiston Abbey and The Garbology Project). (HLF-YH-04-50396.)
- SWT will provide the site; staff trained and qualified in working with young people and expertise in survival skills using ancient technology.
- Rachel Ballentyne and Mary Ellen Crothers (Experimental Archaeologists, West Stow Anglo Saxon Village) will provide advice regarding building techniques and strategies plus other contacts with expertise relevant to the event.

- Beryl Hines, a former teacher and specialist in Roman pottery and kiln building has been commissioned (subject to funding) to develop and supervise the activities of pot making and kiln building.
- Jane Dale, a qualified lecturer and managing director of a food technology training company has been commissioned to develop and supervised the food technology elements of the project.
- Alan Armer, from West Stow, a specialist in ancient woodworking skills with vast experience in working with young people, will develop and supervisor the shelter building and woodworking elements of the project.

4.5.6 The specific objectives for this project are set out in section 3.0 of this project design.

4.5.7 Each of the ‘camps’ will begin with an introduction to the geography of the river valleys and its attraction to peoples of the past as a resource for settlement. Secondly the session will introduce how the aggregates industry, in utilising this same resource in the modern era, has helped provide evidence of these people and how they lived. As a means to a clearer understanding of their local area participants will look at photographs, artefacts and site plans, as well as being involved in filming work related to the production of a documentary film outlined in section (4.7). The experimental archaeology camps will present the activities set out in the table below.

RIVER VALLEYS PROJECT – EXPERIMENTAL ARCHAEOLOGY CAMPS Summer 2007				
Venue	Date	Activity	Who Leading	Main Resources
Lackford Lakes	31-07 - 04-08	Making pottery	BH	Suitable Clays
		Building and firing a Roman style kiln	BH	Suitable Clays, Fuel (seasoned), Tools
		Shelter building	A A	Coppiced timber Thatching, Daub, Fastening
		Sleeping overnight in shelters	DA	
		Food Processing - Meat - Veg	JD	Carcass sheep Seasoned Anglo-Saxon
		Cooking & Eating above!	JD	
		Flint Knapping	JP	Suitable flint
West Stow	20-08 - 25-08	Making pottery	MC	Suitable Clays
		Building and firing a clamp kiln	JM	Fuel (seasoned) Tools
		Food Processing - Meat - Bread in a Day - Veg	JD MC	Carcass prob sheep Relevant veg Unprocessed wheat/corn
		Cooking and eating above	JD	
		Shelter building	A A	Coppiced timber, Thatching Daub Fastening
		Sleeping overnight in shelters (?)	DA	
		Sauna or cooking pit? - Test	DA	Suitable clays, Flints, Timber lining Fuel – seasoned timber
Rede Wood	?-09 - ?-09	Making pottery	BH	Suitable Clays
		Building and firing a Roman style kiln	BH	Suitable Clays Fuel (seasoned) Tools
		Shelter building	A A	Coppiced timber Thatching Daub Fastening
		Working with wood	A A	Green wood
		Flint Knapping	JP	Flint
		Sauna or cooking pit?	JM	Suitable clays Fish Flints Timber lining Fuel – seasoned timber

BH – Beryl Hines, Pottery & Kiln Building Specialist AA – Alan Armer, Woodworking specialist
 JD – Jane Dale, Food Technologist DA – Duncan Allan, Project Manager
 JP – Judy Powell, Suffolk Wildlife Trust JM – Jezz Meredith, SCC Archaeology Service
 MC – Mary Ellen Crothers, St Edmunds Borough Council (West Stow Village)

In detail, the activities will look like this: -

Making Pottery

Participants will:

- Study archaeological evidence of pottery manufacture from aggregate extraction areas
- Study pottery forms from aggregate extraction areas with attention to shape, use, fabric, decoration etc
- Make individual vessels for firing
- Agree on finish – burnished, blackware, redware etc

Building a Roman/Saxon Kiln

Participants will:

- Study archaeological evidence of kilns from aggregate extraction areas
- Discuss evidence and develop a design for kiln
- Agree on final design in consultation with specialist
- Build kiln, adjusting design where necessary
- Fire kiln – with volunteers from participants sleeping overnight during firing exercise
- Evaluate results against original hypothesis e.g. was firing successful? Percentage of waste? Is finishing on pottery as expected? How has kiln performed?
- Consider and compare evidence left behind against evidence from archaeological remains.

Shelter Building

Participants will:

- Study archaeological evidence of habitation structures from sites where aggregates extraction has taken place – [West Stow Anglo-Saxon village lies within an area of gravel extraction and numerous roundhouses are recorded from the Gipping Valley].
- In small groups consider possible designs from available evidence
- Develop a design, considering time constraints/size, available materials, evidence that has not survived
- Build shelter with guidance from specialist, modifying as problems arise
- Test shelters for comfort, practicability. Including an overnight stay for willing volunteers.
- Suggest modifications, which would not affect archaeological evidence – light, ventilation, cleanliness etc.

Food Processing

Participants will:

- Evaluate archaeological evidence from river valleys of bone remains, cereal residues, pot residues and cutting tools available to specific ancient culture/period – e.g. Prehistoric, Roman and Anglo-Saxon.
- Consider food resources which would be available within the river valley area but for which there may not be evidence available e.g. flora and fauna growing wild
- Look at documentary evidence available – ancient recipes
- From available evidence, compile menu to be cooked and eaten
- Experiment with ancient food types and methods of cookery to produce an edible meal
- Experience the process of butchering a carcass to produce joint of meat using both metal and flint tools
- Produce and eat a meal for their team members
- Evaluate meal and consider in terms of palatability/nutrition

Flint Knapping

Participants will:

- Study examples of flint from river valleys area
- Consider range and variety of uses to which flint can be utilised
- Learn to recognise the characteristics of worked flint
- Be able to appreciate the precision and skill required to work flint
- Work with an experience flint knapper in producing a range of tools
- Test worked examples and compare their efficiency against modern alternatives
- Consider the limitations of a flint based technology in the historic environment

Sauna or Cooking Pits

This element of the project will attempt to test two alternative hypotheses for the archaeological evidence of burnt flint spreads and associated clay/timber lined troughs discovered within the river valley.

Participants will:

- Evaluate the archaeological evidence of fire cracked flint and associated structures from within the river valleys areas
- Negotiate and discuss in two groups the process of reconstruction based upon available evidence and potential risk from flint
- Agree on final plan
- Construct troughs to agreed plan, modifying plans as problems arise
- Test and evaluate opposing hypotheses by – using one structure as a sauna and using one structure as a cooking pit

Working with Wood

This element of the project will take place at Rede Wood. The site is an established oak woodland with hazel coppice within and we will work within this woodland area. Led by Alan Homes, a woodworking specialist we will look at how woodland would be utilised and managed in the past.

Participants will:

- Work with a specialist in recognising the characteristics of different green woods
- Consider the range of uses to which timber might be put – hurdles, wattle, charcoal, pegs etc
- Look at the range of tools and the evidence they leave behind
- Experiment with tools and techniques
- Produce a range of products to enhance shelters
- Evaluate the serviceability/efficiency of products

Task 5a Set up Steering Group Sub-committee Meetings

A total of 6x meetings should be held between the three Steering groups involved in events programmes, plus an invitation to the representative from English Heritage. The first should be a planning meeting to ensure that the events as laid out in the Project Design are still deliverable, and to amend the existing plan or integrate new ideas. A follow-up meeting will be required just prior to the commencement of each of the events and a final session afterwards to assess the project outcomes and the potential for further similar events beyond the life of the project.

Task 5b Final confirmation of event dates

A time period within which the projects will be completed has been agreed. Specific dates will be finalised with steering group members and young people once full funding has been obtained.

Task 5c Undertaking risk assessments

Additional risk assessments and Health and safety policies will focus on the safe delivery of the proposed activities and ensuring that there are no conflicts between parts of the site being designated for special events and normal public

access. Health & Safety advice relating to the well-being of students will be provided by Martin Hore (SCC Advisory Teacher for Adventurous Outdoor Activities). He will also check any existing risk assessments undertaken by staff at Lackford Lakes or West Stow Anglo Saxon Village. (See Health and Safety section 4.5)

- Task 5d Confirm specialists
Once the event dates can be confirmed (subject to securing the project funding) specialists will be contacted.*
- Task 5e Agree programme for each event and establish ongoing liaison with participatory groups and specialists*
- Task 5f PM to organise events*
- Task 5g Order necessary materials and equipment for each event.*
- Task 5h Set up Site for each event*
- Task 5i Induct staff and participants onto each site.*
- Task 5j Compile video footage*
- Task 5k Evaluate success of event against aims and feedback from participants.*

4.6 Health and Safety during the Project

Task 6- Develop H and S risk assessment procedure, and manage risk during project

- 4.6.1 This project intends to engage young people in activities that are potentially hazardous to all concerned.
- 4.6.2 The Garbology Project (YH-04-50396) showed that it is possible, with careful planning, risk assessments and rigorous health and safety procedures, to work in potentially hazardous situations with minimal risk. The Garbology Project regularly worked on sites where broken glass and sharp metals were present in large quantities. Working to clear, simple rules, groups of up to 30 children, as young as 8, were able to excavate in 20th century rubbish pits. A safety record was established, that was far better than a lunchtime break in an average primary school: In this case a single small cut over a period of 20 days and involving over 400 children.
- 4.6.3 When planning events and school visits staff, led by the project manager will draw on the experience gained from the Garbology Project, plus advice from consultants Nick Wilding & Martin Hore (SCC Health & Safety Manager and Advisory Teacher for Adventurous Outdoor Activities). They will produce risk assessments and health and safety policies that will allow the aims and objectives of the programme to be fulfilled in a safe secure environment.
- 4.6.4 The project manager will ensure that all key members of staff involved in working with young people hold current CRB checks. .
- 4.6.5 In addition a case study of the project will be available on SCC Education portal as an appendix to the policy 'Educational Visits – Regulations and Guidance 2007' The intention being to offer help, confidence and encouragement to teaching staff and educational groups when considering and planning practical events.
- 4.6.6 Aims
- To provide a safe environment in which young people, staff and visitors can enjoy challenging and exciting activities both in the school environment and in the field.
 - To provide a case study of safe, measured practice for schools and other organisations

- Task 6a Risk Assessment*
The Project Manager and Health & Safety Manager will visit each site in order to assess:

- the risk to the health and safety to groups and individuals posed by the site.
- the potential risk posed by the proposed activities.

This will lead to the production of written risk assessments and a Health and Safety policy, which will be discussed with the stakeholder sub-committee and site managers for comment and amendment, prior to distribution to site and event staff, volunteers, schools and youth groups.

Task 6b Briefing sessions

There will follow a briefing session of all staff prior to the event, and induction of all students and accompanying staff at start of event

Task 6c Review policies as means of informing future events.

At end of event the health and safety procedures produced and developed for the events will be written up as case study in good practice. This document will be edited by the Health & Safety Manager, prior to being placed on schools portal.

4.7 Film Package for Use as an Educational Resource

Task 7- To produce a video diary, and film record of the events

4.7.1 Outline

The project will commission a film company to produce 2 film packages designed to meet the objectives above.

The project manager has approached a small independent company (Jenie Films) which is willing to undertake this task. The company has experience in working with young people and is keen to involve students in the filming process.

To maximise the educational benefits of this work filming will take place at each of the experimental archaeology events.

4.7.2 Meeting the Objectives

Documentary Film (3.5)

A 10 –15 minute documentary film will be produced that will outline the landscape and archaeology of the river valleys through film and still photographs. Further footage will detail the experimental work through the eyes of the students. We will use video diary entries from students to offer personal views of the project and enhance the student-narrated commentary.

Filming will be directed by the film-company, whose role will be to offer advice and guidance to students who will operate the cameras.

Students using hand-held camcorders will make video diaries on site.

Commentary will be added later. Staff from the English, Humanities and Media Studies departments of Claydon High School, Thurleston High School and Thomas Wolsey Special School will work with students to achieve this.

The project manager will co-ordinate the work to ensure clear communication between schools and the film company and ensure deadlines are met.

Nikki McGuinness (Claydon High School) and Neil Croxford (Jenie Films) will be the main contacts for the school cluster and film company respectively.

4.7.3 Staff Training Resource (Objective 3.5)

A 10 – 15 minute instructional film will be developed and will be available to all Suffolk teaching staff via the schools education portal (Slamnet). It will also be available to interested steering group members (Suffolk Wildlife Trust and West Stow Anglo Saxon Village) as well as countryside agencies (Suffolk County Council & Suffolk Coasts and Heaths). Once developed the resource could be made available to a wider out of county audience

The film will form part of the educational package available on SCC Education portal (Slamnet) and as a separate DVD. Its aim is to enthuse, inspire and give practical support to teachers wishing to undertake adventurous and exciting activities.

In content the film will include a step by step guide to building some of the structures tackled during the experimental archaeology work with students. It is intended to include the following activities:-

- Building and firing a clamp kiln
- Constructing shelters based upon archaeological evidence
- From Corn to Bread, a guide to making bread using simple ovens based upon archaeological evidence.

Commentary will be added to the film to clarify the procedures.

Additional notes on accessing resources and health & safety issues will be included as a printable resource.

The Project Manager will work closely with the film-company and Dale Banham (SCC Advisory Teacher Humanities) to ensure the resource meets the standards required for inclusion on the Slamnet portal.

4.7.4 Benefits to the Project

- Students involved in the project benefit from the enhancement of their curriculum.
- The documentary film, posted on both the website and SCC Slamnet portal will provide a permanent resource for teachers of history and students undertaking research as part of their studies.
- It will significantly enhance the project website.
- It will compliment and serve as an introduction to the training package, as outlined in Objective 2.
- The Staff Training Resource will support teachers and agencies working with young people in undertaking adventurous working with young people in undertaking adventurous work in the future.

Task 7a Commission Jenie Films to undertake filming.

Task 7b Discuss content, requirements, audience as set out in (4.7.2) & (4.7.3)

Task 7c Arrange for filming to take place at the three venues discussed in (3.5)

Task 7d Shoot film and record dialogue

Task 7e View progress through project

Task 7f Agree final footage with film company and Dale Banham A/T SCC Humanities team

Task 7g Completed films to included on education portal

4.8 Project Analysis

Task 8- to produce a full report of the project.

4.8.1 The project has been devised to be one that can improve through a process of self-evaluation. Data will be collected throughout project from evaluation sheets handed out to client groups and from feedback given by the principal steering group members at the steering group meetings. By the end of the project it should be clear:

- what went well with the project
- what new experiences have been learned
- what aspects of the project could be repeated (possibly by other Steering groups)
- what aspects could be improved, and
- how the project could be developed further

These outcomes will form the basis of the project evaluation report.

- Task 8a Review evaluation sheets from educational events*
The review of feedback returned either via evaluation forms or individual / group comment will be undertaken on a regular basis and results fed back to the steering group meetings, who will act as a focus group, able to make recommendations for improvements in the project as it progresses.
- Task 8b Production of a project evaluation report*

5. Resources and programming

5.1 Staffing & Equipment

5.1.1 Staffing

The project team will comprise the following staff for the main elements of the work

Duncan Allan (Outreach Officer and Project Manager)
Jezz Meredith (Project Officer SCC)
Anna West (Website Manager)
Keith Wade (County Archaeologist)
William Fletcher (HECA Officer)
Clare Good (Financial Asst.)
AN other (Minute Secretary)

5.1.2 Resources

The majority of purchases will relate to the educational work.

The experimental archaeology work will rely heavily upon bulk materials (brick clay, coppicing and wood, flint and thatching. Suppliers have been identified for this. These materials will need transporting and these costs are included within the budget statement.

Equipment for the school visits (4.4.1) is still in place from The Garbology Project. It has been heavily used and will need replacing either in part or in full before the end of this project. Costs for replacement are itemised within the budget.

To produce the film record and teaching resource the project will need to purchase recording equipment for use on site. Whilst the film company will provide their own equipment for the main recording, students will be encouraged to record their own video diaries using small hand held 'disposable' cameras plus a portable hard drive for easy downloading whilst on site.

The project will also require a laptop computer with 1gb RAM and digital projector for both school visits and to allow for flexible working both by the project manager and the website manager when away from their office base.

On school visits sessions are carried out in school halls where the large open space is ideal for the delivery of the sessions. Very few schools have the projection equipment necessary in their halls to allow the use of 'Powerpoint' type presentations. The purchase of suitable equipment would make delivery more efficient and easier to manage. Laptops held by the Archaeology Service are currently all in use. The purchase of an additional machine is therefore necessary in order not to compromise other work within the Service.

Timetable

The project is expected to run for 11 months, commencing 01May 2007 and to end 31st March 2008. The project can be split into roughly three stages.

Stage 1:Resourcing the project (April 07 –July 07)

This will involve:

- the purchase and assembly of resource materials
- the setting up of the web-site
- ensuring that all events can run – confirmation of venues, personnel etc.

- advertising public events via the website, poster campaign, newsletters and the local press

Stage 2: Delivery of event-based activities (July 07– March 08)

- School visits
- Open days
- Group activity days

Stage 3: Project Analysis (February 08– March 08)

- Evaluation of the project and the likely value added dimensions with the steering group members
- Publication of the results of the ALSF projects in Suffolk

For a detailed breakdown of tasks identified within the project design see the Task List and Gantt chart (Tables 3 & 4)

6. Bibliography

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The National Curriculum, A Handbook for Primary Teachers. DFEE/QCA Publications

The National Curriculum, A Handbook for Secondary Teachers. DFEE/QCA Publications

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Appendix 1 Curriculum Vitae of Principal Personnel

Duncan Allan – Project Manager

Suffolk County Council Archaeology Service (SCCAS)

Cert Ed HMI Ofsted

Duncan is a member of SCCAS Field Team with five years excavation experience. He was a primary school teacher for 25 years, 12 years as a head-teacher. He is a qualified inspector of primary education.

Whilst with SCCAS he has developed and managed two major lottery funded outreach projects – the Leiston Abbey Project with a local youth group and The Suffolk Garbology Project. Duncan will be seconded full time to manage the project for Suffolk County Council.

Jezz Meredith – Assistant to Project Manager

Suffolk County Council Archaeology Service (SCCAS)

BA (archaeology) M. Phil PGCE (Primary Education)

Jezz is a project officer with SCCAS Field Team with 15 years experience including posts in East and Central Africa.

He has specialist knowledge of pottery analysis. He is a primary school teacher and has developed and co-managed outreach projects for Suffolk County Council including The Leiston Abbey Project and The Ice House Project both involving excavation work with young people.

Jezz will be seconded from the field team to assist in the preparation and running of the educational package.

Anna West – Web Page Developer and Manager

Suffolk County Council Archaeology Service (SCCAS)

BSc Hons (Science Based Archaeology)

Anna has been a member of the SCCAS Field Team for two years and has assisted on lottery funded projects for Suffolk County Council including Barber's Point Project and Hitcham Villa Project in her capacity as Finds/Post Excavation Supervisor.

She has previously worked in environmental and heritage interpretation including museum exhibition design and build, she also has experience of archaeological excavation in the UK and North America.

William Fletcher - Historic Environments Countryside Advisor

Suffolk County Council Archaeological Service

BA (archaeology)

Will began his archaeological career as a trainee in January 1991 when he joined Shropshire County Council's archaeology team, before becoming a student at Manchester University, where he graduated in 1995. After spells with English Heritage and a number of commercial archaeological organisations Will joined the University of Hull in 1997 as a Research Assistant, and Field Officer with English Heritage's Humber Wetlands Project. After the conclusion of the project he joined the Archaeology Department of Exeter University as a Research Fellow.

Will specialises in the management of coastal and wetland heritage, and has contributed to a number of projects on the management of coastal and wetland heritage, Iron Age archaeology and metallurgy and landscape archaeology.

Appendix 2

Suffolk County Council Health and Safety Statement



Safety is a condition of employment!

Health and Safety Policy Statement

To be displayed prominently in all Council premises.

Suffolk County Council recognises that good health and safety management has positive benefits to every organisation. A commitment to developing a high level of safety makes good business sense and a coherent safety management system will be therefore developed, to ensure the safety of staff and others.

The performance of both individuals and the organisation will be monitored to pre-determined standards. The corporate safety board will have lead responsibility for this process and the following will form the core principles for managing health and safety within the council:

1. A positive safety culture, which is actively and visibly supported by senior management, will be encouraged throughout the organisation. Equal importance will be given to achieving health and safety targets, as with all other business targets and its performance will be monitored. Resources in the form of finance, equipment, personnel and time will be provided. Adequate arrangements for ensuring the health and safety of visitors will be developed and external agencies will be consulted where necessary.
2. The requirements set by statutes, regulations, codes of practice, guidance and best practice will be met at all times. Where possible, we will adopt systems that exceed those standards. Ensuring the continual improvement to health and safety standards and performance are a mandatory requirement for all staff.
3. Health and safety management is an integral part of the manager's function, integrated into management duties and the decision-making processes. Managers have specific duties and responsibilities to comply with this and all other council policies, and to ensure that systems of work and supervision are designed to take account of all health and safety risks.
4. The approach to health and safety will be based on the identification and control of risks.
5. Appropriate systems will be developed and maintained for the effective communication of health and safety matters. Employees will be provided with a consultation and discussion process during decision-making either on an individual basis or through their representatives.
6. Information, instruction and training will be provided to employees and others, including temporary staff to ensure competency and safe performance of duties.
7. Systems will be developed to ensure that incidents and 'near-misses' are reported, analysed and investigated, to provide information for future planning, so that action can be taken to reduce a re-occurrence.
8. Procedures will be established to ensure that safe equipment and plant are provided and maintained for employees and non-employees.
9. Employees have specific responsibilities to support management in their activities, and to take care of themselves and others who could be affected by their activities. Safety is the responsibility of everyone within the organisation.
10. Arrangements for the effective planning, development and review of this policy statement, and other safety arrangements will be clearly stated in supporting documents.

Effective management of health and safety can only be achieved by a co-operative effort at all levels in the organisation. I am personally committed to making Suffolk County Council one of the safest places to work, and I expect total commitment from all employees in helping me achieve this goal.

Signature 

Mike More
Chief Executive
Suffolk County Council

Dated 1st January 2004

There is nothing we do, that warrants someone's safety being placed at undue risk

Appendix 4

References for specific objectives (3.0)

References to 'A Vision for Teaching and Learning in 2020, ALSF Priorities-E/H Grants, Policies and Guidelines and The National Curriculum Key Stages 2 & 3

A Vision for Teaching and Learning in 2020.

Personalising Learning (p6)

Aims – Overall Aims

- Teaching enthuses pupils and engages their interest in learning
- Learners are active and curious
- Create their own hypothesis
- Ask their own questions
- Coach one another
- Experiment with ideas knowing that mistakes and being stuck are part of learning

This engagement allows learners of all abilities to succeed.

'Soft Skills'

- VS1 Being able to communicate orally at a high level
- VS2 Reliability and perseverance
- VS3 Knowing how to work with others in a team
- VS4 Knowing how to evaluate information critically
- VS5 Taking responsibility
- VS6 Being confident and able to investigate problems and find solutions

These skills and attitudes are important. However the National Curriculum gives them relatively little weight and they are measured, recorded and reported inadequately.

Greater use of adults other than teachers to extend the range of skills and support for pupils.

Greater reliance on IT – Link to website and filming.

ALSF Priorities-E/H Grants, Policies and Guidelines

A1 Deliver to public and professional audiences the full benefits of knowledge gained through past work in advance of aggregates extraction.

A2 Promote understanding of the conservation issues arising from the impacts of aggregates on the historic environment.

A3 Offer training and professional development programmes to raise awareness of and promote best practise to industry, historic environment professionals and other stakeholders.

A4 Develop the analysis and dissemination of important data from past work in response to aggregate extraction.

A5 Develop local education, outreach and community involvement, which raise awareness of conservation issues, communicates the knowledge gained through the extraction process and raises the profile of the positive benefits of extraction to communities living in current extraction areas.

A6 Disseminate ALSF funded and other related work to Steering groups.

A7 Deliver local education, interpretation, outreach and community involvement associated with past extraction, which raise awareness of conservation issues and communicates the knowledge gained through the extraction process.

A8 Provide a level of training to partner organisations that will allow the extension of similar outreach work beyond the life of the project.

A9 Promote safe working practices in student based outdoor activities.

The National Curriculum Key Stages 2 & 3

For all references to the National Curriculum see :-

www.nc.uk.net

Key Stage 2	Key Stage 3
English p 50 - 51	English p 46 - 47
History p 105	Design & Technology
Geography p112 - 113	Information & Communication Technology p 144 -145
PSHE and Citizenship p139 - 140	History p 150 - 151
	Geography p 156 - 159
	Citizenship P184 - 185
	PSHE p 188 - 191

Appendix 5

Glossary

EH	English Heritage – ALSF priorities. Coding as in English heritage documentation grants, policies and guidance
HWTMA	Hampshire and Wight Trust for Marine Archaeology
SCC	Suffolk County Council
SCCAS	Suffolk County Council Archaeological Service
SWT	Suffolk Wildlife Trust
YAC	Young Archaeologists Club
A.i – A.vi	Relates to the overall aims of the project

NC	National Curriculum
KS	National Curriculum Key Stage

Subjects

CIT	Citizenship
DT	Design and Technology
EN	English
GEOG	Geography
HIS	History
PE	Physical Education
PoS	Programme of Study
PSHE	Personal, Social and Health Education
VS	2020 Vision – Soft Skills

