

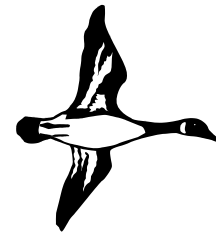


Educational Opportunities at Stanwick Lakes in 2011

A guide for teachers and group leaders



www.stanwicklakes.org.uk



A Brief Introduction

Present Day

Stanwick Lakes is Northamptonshire's newest country park and has been open to the public since January 2006. The site covers more than 750 acres and is made up of lakes and meadow areas as well as a linear path along the route of an old railway-line. There are several areas of young trees which will mature into woodland over time. Hard surfaced paths and bridges make routes around the site accessible to most and three areas of play equipment provide plenty of exercise and enjoyment for youngsters.

The majority of the site is part of the Upper Nene Valley Site of Special Scientific Interest (SSSI) which means that it is a protected wildlife area and home to a variety of plants and animals throughout the year. The site is also a proposed Special Protection Area (pSPA) and proposed RAMSAR site which is due to its' quantity of overwintering birds visiting each year.

History

The site was a sand and gravel quarry for 20 years from 1984 to 2004 and prior to that was farmland. The Northampton to Peterborough railway ran through the middle of the site until the 1960s and a water mill was also removed in the 60s. Archaeological digs carried out in the past at what is now Stanwick Lakes show that the area has been used by man since the first hunter-gatherers roamed England in about 5500 years BC! A variety of people have left clues to their existence on the site since that time, from the Bronze Age burial mounds to a Roman villa, a Saxon manor and a 14th Century water mill.

Facilities

All groups on an educational visit with the Rangers get use of the 'Discovery Zone' in the new Visitor Centre which provides shelter as well as a resource for learning more about the lakes. This is located next to the coach park. The room can fit 30 pupils at any one time with room for bag storage as well as seating. On particularly wet days the room next to the Rangers' cabin can be made available for any extra numbers of children. The Visitor Centre offers a shop, restaurant, indoor toilets and an indoor play area.

The Adventure playground is very popular with children and has several picnic tables adjacent to it. A 10 minute walk from the hub will lead you to the full-sized assault course, popular with older children. The adventure trail is a mile long circuit with climbing rocks, a rope bridge, some large tyre swings and a zip-line on the way around it. There are also some large grassy areas on the adventure trail suitable for playing games or picnicking.



The amphitheatre-style outdoor theatre will also be available for visiting or picnicking and may be used during some education sessions. A large bird hide and a bird feeding area, both near the hub of the site, will be open for viewing wildlife and may also be used during sessions.

Educational Visits

Educational Visits at Stanwick lakes in 2011 cost £2.50 per child with a minimum fee of £50. This fee includes parking, use of the 'Discovery Zone', the sessions themselves and use of the other facilities on site (please see above). There is, of course, no charge for adults!

Rangers are available to lead the sessions but the responsibility of the children lay with the teachers that bring them.

To Book

To make a booking please contact the Ranger Service with your preferred dates. A provisional booking can then be made and an invoice will be sent to the school. **A booking shall only be confirmed on receipt of payment.** A confirmation letter will be sent to the school (often by e-mail) with a timetable sent nearer the date of the visit.

Risk Assessments

Standard risk assessments for Stanwick Lakes will also be supplied to you on request. These should help you to write your own risk assessment for the school's visit. In addition, the Rangers will complete a risk assessment for the education session. This will be for your school, on the day and doing the activity that you choose.



Education Sessions Available



The Stanwick Lakes Ranger Service is offering a variety of topics for educational visits this year. These topics have been planned with the National Curriculum in mind and will be hands-on activity sessions tailored for your particular group. Further topics and individual activities may be offered in future years as the educational visits are developed.

Activities on Offer in 2011

- 1 Sensory Explorers – Nursery
- 2 Freshwater Life A – Key Stage 1 Science
- 3 Freshwater Life B – Key Stage 2 Science
- 4 Marvellous Minibeasts A – Key Stage 1 Science
- 5 Marvellous Minibeasts B – Key Stage 2 Science
- 6 Environmental Change Rivers – Key Stage 2 Geography
- 7 Environmental Change Stanwick Lakes Case Study - Key Stage 2 & 3 Geography
- 8 Amazing Outdoor Art A – Key Stage 1 Art
- 9 Amazing Outdoor Art B – Key Stage 2 Art
- 10 Shelter Building/Survival Skills - Key stage 2 & 3 Design & technology

Stanwick Rangers are adaptable to most things so if there are any other subjects you would like us to cover during the day then let us know while arranging the trip.

Please see the following pages for a description of the corresponding topic for each one showing the links to the National Curriculum.



1. Sensory Explorers



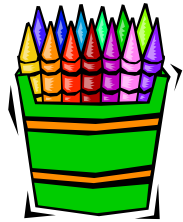
Target Age: 3-4

Length of Session: 1 hour

Aim of Session:

Using our senses we will explore the lakes paying particular attention to the seasons.

Summary of Activities:



The Ranger will lead the children on a sensory journey through the park where the children will use their senses in a variety of fun activities to discover more about nature. The session will include listening games, looking at colours and different textures as well as using our sense of smell to make smelly cocktails! Other environmental games will be played depending on time and the season.

Links to the Early Years Foundation Stage

- **Enabling Environments**
 - The Learning Environment
 - The Outdoor Environment

Suggestions for Further Work

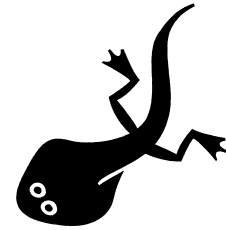
- Leaf and bark rubbings.
- Learn the different noises that creatures make.
- Look out for stories featuring wildlife.



2. Freshwater Life A

Target Age: 5-7

Length of Session: 1½ hours



Aim of Session:

To introduce children to the variety of freshwater life in a lake, how they live and the connections between the various plants and animals.

Summary of Activities:

Fresh water is home to an amazing array of freshwater animals, all of which are adapted for a specific way of life. An environmental game will be played to start the session and then the Ranger will take the group pond-dipping. All the children can have a go at sampling and then identifying the creatures they find using a simple picture key before recording them. There will be a discussion with the Ranger about some of the creatures they find. The children will then make themselves into food chains to show how the animals and plants in the lake relate to each other.

Prior Knowledge Required

Basic knowledge of insect life cycles, such as the life cycle of the butterfly, is all that is required.

National Curriculum Links

· **Science Key Stage 1**

- Scientific enquiry – make and record observations, communicate results, follow instructions, make simple comparisons and review the work.
- Life processes and living things – animals and plants in the local environment, how to treat them and care for them, what they need to live, grouping the pond animals according to their observable similarities and differences.

Suggestions for Further Work

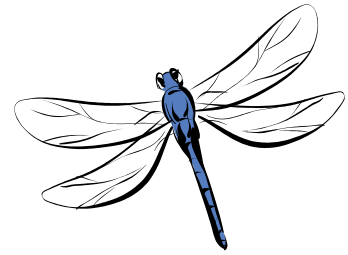
- Find out about the water cycle.
- Measure rain fall in the school grounds.
- Look out for stories involving pond animals.



3. Freshwater Life B

Target Age: 7-11

Length of Session: 1½ hours



Aim of Session: To introduce children to the variety of freshwater life and the adaptations of and connections between some of the wildlife that lives in it.

Summary of Activities:

Fresh water is home to an amazing array of freshwater animals, all of which are adapted for a specific way of life. The Ranger will lead an appropriate game to begin and then take the group pond-dipping where all the children can have a go at sampling and then identifying the creatures they find using a key before recording them. The adaptations and way of life of some of the animals will then be discussed before the children make a giant food web to show how the animals and plants in the lake interact.

Prior Knowledge Required

Basic knowledge of insect life cycles, such as the life cycle of the butterfly, is all that is required.

National Curriculum Links

· **Science – Key Stage 2**

- Scientific enquiry – explain how living things work, use simple equipment, collect evidence, make observations and comparisons and review the work.
- Life processes and living things – make links between plants and animals and their life processes, movement of pond animals, use keys to identify and group the animals, adaptation to environment, feeding relationships.

Suggestions for Further Work

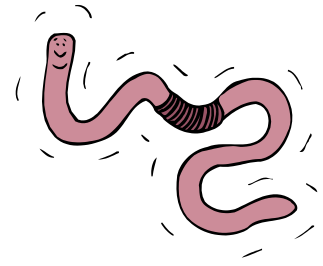
- Find out more about some of the pond plants.
- Make up your own key to identify everyone in the class.
- Carry out a study of another local pond and compare it to the results you obtained at Stanwick Lakes.



4. Marvellous Minibeasts A

Target Age: 5-7

Length of Session: 1½ hours



Aim of Session: To encourage children to explore the world of minibeasts and their homes and develop an informed attitude to their care.

Summary of Activities: An un-nature trail will start the session and get the children used to looking around as well as introduce the importance of colour. The term Minibeast covers a range of invertebrates including spiders, insects, millipedes, woodlice, slugs, snails, etc. A bug hunt for these creatures is the main part of the session. Each group of children is given a bug pot and told how to use it to help with the search. Care of minibeasts and respect for their homes is encouraged throughout. The children will sort the animals into groups by simple structural differences (e.g. number of legs) during a discussion with the Ranger.

Prior Knowledge Required

Little is required but it would be beneficial if the pupils were familiar with the life cycle of a butterfly.

National Curriculum Links

· Science – Key Stage 1

- Scientific enquiry – make and record observations, communicate results, follow instructions, make simple comparisons and review the work.
- Life processes and living things – animals and plants in the local environment, how to treat them and care for them, what they need to live, grouping the minibeasts according to their observable similarities and differences.

Suggestions for Further Work

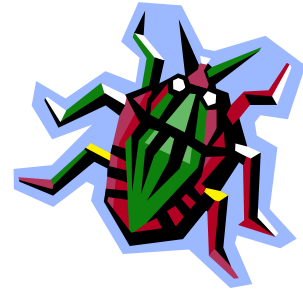
- Carry out a survey of the minibeasts in your school grounds.
- Look for Minibeasts appearing in stories.
- Find out what minibeasts eat...and what eats them!
- Find out what insects are useful to people e.g. bees providing honey.
- Encourage the children to explore their own garden or that of a friend or family member.



5. Marvellous Minibeasts B

Target Age: 7-11

Length of Session: 1½ hours



Aim of Session: To introduce the children to the concepts of structural adaptations and how they help survival as well as to explore the world of minibeasts and their homes and develop an informed attitude to their care.

Summary of Activities: An un-nature trail introduces the concepts of camouflage and adaptation as the children look for man made objects hidden along a path. Minibeasts provide a wealth of opportunities for investigations into growth, adaptation and interactions between living things. A bug hunt for these creatures is the main part of the session. Each creature is examined and its structure, behaviour and role in the habitat are discussed before the children look for different minibeasts. Care of the animals and respect for their homes is encouraged throughout. Design-a-beastie is a chance for the children's imaginations to run free on their own imaginary beast with its own adaptations.

Prior Knowledge Required

Basic knowledge of the variety of minibeasts would be helpful although not essential. Some knowledge of camouflage would be beneficial.

National Curriculum Links

· Science – Key Stage 2

- Scientific enquiry – explain how living things work, use simple equipment, collect evidence, make observations and comparisons and review the work.
- Life processes and living things – make links between plants and animals and their life processes, movement of minibeasts, use keys to identify and group the animals, adaptation to environment.

Suggestions for Further Work

- Carry out a survey of the minibeasts in your school grounds.
- Build up a food web showing what minibeasts eat and are eaten by.
- Find out what insects are useful to people e.g. bees providing honey.
- Encourage the children to explore their own garden or that of a friend or family member.



6. Environmental Change - Rivers

Target Age: 7-11

Length of Session: 1½ hours



Aim of Session: To encourage the children to think about rivers and their surroundings and how these areas change in time and space and with human impact.

Summary of Activities:

This topic concentrates on the watery aspects of the site. There'll be a role-play activity on the water cycle before looking at a large stream and drawing an annotated sketch of the area. We will discuss the changes in a river over space and time, explore the Reedbed and find out about the conservation work done there. We'll also play a game about the life in a pond and, of course, "Pooh sticks"!

Prior Knowledge Required

Knowledge of the water cycle is expected and to have heard of floodplains would be advantageous.

National Curriculum Links

- **Geography – Key Stage 2**
 - Geographical enquiry and skills – asking questions, use appropriate vocabulary, learning fieldwork techniques, using secondary sources of information.
 - Knowledge and understanding of places – describing places, explaining why places are like they are, identifying how and why places change, comparisons to other local places.
 - Knowledge and understanding of patterns and processes – recognise some physical processes and how they cause change.
 - Knowledge and understanding of environmental change – how people affect environments

Suggestions for Further Work

- Investigate other similar places in the county – both quarries and parks.
- Do a project about how to manage Stanwick Lakes sustainably.
- Sketch another river and compare it with the Mill Stream at Stanwick Lakes.



7. Environmental Change – Stanwick Lakes Case Study

Target Age: 7 +

Length of Session: 1½ hours



Aim of Session: To use Stanwick Lakes as a case study for Environmental Change. The session will take the students on a journey through Stanwick Lakes' recent history from its use as a quarry to the creation of the countryside attraction and nature reserve it is today

Summary of Activities:

The session will begin at the Discovery Zone with an introduction to Stanwick Lakes and a slide show of the Stanwick Quarry. We will then go on an extensive site walk. The first half of the walk will investigate the locality as a quarry, starting from the site of sand and gravel extraction and following its route to where the processing plant once stood. We will discuss issues including why a quarry was sited here and related restricting factors, the use of aggregates and the impact of quarrying on the land and community. In the second half we will find out about the creation of Stanwick Lakes as a Countryside Attraction and Nature Reserve. Students will be able to see the habitats that have been created and how they are managed for the benefit of wildlife. As we return to the Discovery Zone, we will look at and discuss the infrastructure provided for the visitors to this Countryside Attraction, including car parks, play areas and the Visitor Centre.

Prior Knowledge Required

None required, but a basic knowledge of what a quarry is and uses of aggregate in industry would be of benefit.

National Curriculum Links

Key Stage 2 Geography

- Geographical enquiry and skills
- Knowledge and understanding of places
- Knowledge and understanding of patterns and processes
- Knowledge and understanding of environmental change and sustainable development

Suggestions for Further Work

- Further studies into other types of quarries
- Visit an active quarry and visualise resulting habitats and restoration work required.
- Look at Geology of soils in your area, where would you site a quarry?

8. Amazing Outdoor Art A

Target Age: 5-7

Length of Session: 1½ hours



Aim of Session: To introduce the children to the concepts of environmental art through exploring and investigating the colours, shapes and patterns of Stanwick Lakes and to give the children the opportunity to create their own outdoor art work.

Summary of Activities:

The Ranger will lead the group in an introductory game to encourage the children to look closely at nature and develop their observation skills then the group will explore Stanwick Lakes to discover how artists have been inspired by the surrounding natural environment. They will create an outdoor art gallery by gathering natural materials, and making individual pieces of art which will be displayed in the amphitheatre. Their work will be viewed and discussed by the whole group and documented by digital camera. The session will finish with each child creating a Native American Story Stick as a souvenir of their visit to Stanwick Lakes.

Prior Knowledge Required

None necessary, but a study of artist and sculptors that work in the natural environment may be helpful before the visit. Support material will be available to borrow from the Stanwick Lakes Education Centre.

National Curriculum Links

· Art and Design – Key Stage 1

- Record from first hand observation, experience and imagination, use a range of materials, design and make images and artefacts, review what they and others have done, compare art in time and culture.

Suggestions for Further Work

- Make a display of the art created at Stanwick Lakes.
- Further Study of artists and sculptors that create artwork in the natural environment.
- Create environmental art in the school grounds.



9. Amazing Outdoor Art B

Target Age: 7-11

Length of Session: 1½ hours



Aim of Session: To introduce the children to the concepts of environmental art through exploring and investigating the colours, shapes and patterns of Stanwick Lakes and to give the children the opportunity to create their own outdoor art work.

Summary of Activities:

The Ranger will lead the group in an introductory game to encourage the children to look closely at nature and develop their observation skills then the group will explore Stanwick Lakes to discover how artists have been inspired by the surrounding natural environment. They will then create an outdoor art gallery by gathering natural materials, and making individual pieces of art which will be displayed in the amphitheatre. Their work will be viewed and discussed by the whole group and documented by digital camera. The session will finish with each child creating a Native American Story Stick as a souvenir of their visit to Stanwick Lakes.

Prior Knowledge Required

None necessary, but a study of artist and sculptors that work in the natural environment may be helpful before the visit. Support material will be available to borrow from the Stanwick Lakes Education Centre.

National Curriculum Links

· Art and Design – Key Stage 2

- Record from experience and imagination, select ideas to use in their work, collect visual and other ideas, combine visual and tactile qualities of materials, use a variety of methods to design images and artefacts, evaluate their work and that of others, how to combine visual and tactile elements, roles and purpose of artists.

Suggestions for Further Work

- Make a display of the art created at Stanwick Lakes.
- Further Study of artists and sculptors that create artwork in the natural environment.
- Create environmental art in the school grounds.



10. Shelter Building/Survival Skills

Target Age: 7 +

Length of Session: 2 hours



Aim of Session

To introduce children to basic survival skills and shelter building with natural materials found at Stanwick Lakes. The session encourages children to communicate, work as a team and use problem solving techniques.

Summary of Activities

A survival scenario will be presented to small groups and they will be given a survival pack to decide on the items importance to survive the situation. The groups will discuss the reasons for their decisions, then discuss other uses of the items and place them in the correct order for survival. We will look at woodland survival and surviving different elements of weather. Organic materials are introduced into the equation to illustrate what little people can survive on. Fire lighting techniques are demonstrated to the larger group. Shelter building will then fill the majority of the session with different designs shown beforehand made with materials found at Stanwick Lakes. Pupils will have to work as a team to build the best shelter with limited materials.

Prior Knowledge Required

None

National Curriculum Links

Key Stage 2+

- Physical Education - Outdoor and adventurous activities
- English - Sharing ideas, insights and opinions
- Design and Technology - Designing skills and making skills
- Health and Safety

Suggestions of Further Work

Further work into building the ideal shelter from what they have learnt on the day. Design their shelters on paper before making some miniature shelters from some classroom materials.

Other team building exercises benefit large groups with communication and listening skills.

Contact Us:



Stanwick Lakes Ranger Service

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Stanwick
Northants
NN9 6GY



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How to get to Stanwick Lakes:

Stanwick Lakes is situated off the Stanwick roundabout on the A45 in East Northamptonshire between Wellingborough (eight miles away) and Thrapston (seven miles away).

