Key Stage Two Fieldwork and Activities

This guide gives a brief introduction to some of the most popular Key Stage Two sessions on offer across the island and aims to give you a taste of what kind of session might be available to you and your students.

I understand that in many cases, the objectives outlined here will not align perfectly with those you may wish your students to explore during their fieldwork experience. Wherever possible I can tailor make a fieldwork experience to suit your curriculum - do get in touch with me to discuss other options.

What made these footprints?

Location: Hanover Point

Duration: Half Day

After a short walk down to the beach, pupils will reach the site of the 'footprint' casts of the Iguanodon - a dinosaur from the Early Cretaceous period. Through story telling, pupils learn of the movement of the Earth's crust and the processes that made the Isle of Wight a swamp at the time of the break up of Pangaea. The 'footprints' are then revealed and pupils see if they can find their own example in the shore line.

With the help of a scaled picture, pupils (in teams of 5 or 6) are then tasked with making a 2D beach art representation of the Iguanodon by only using beach materials. Teachers can judge the creations based on accuracy and attention to detail as well as teamwork.

Skills:

- Maths (working to scale and estimations)
- Team work and Leadership
- Creativity
- Application of knowledge

Does Ventnor need a new pier?

Location: Ventnor

Duration: Half Day

Pupils start the day at Ventnor Bay and learn about the site of the old pier and how the front of Ventnor has changed over time. Collectively the group then designs a questionnaire using a premade template that they can ask to members of the public. The aim is to find out who might use a pier, what people would like to see on it and the costs and benefits a pier might bring. The questionnaire will cover three different styles of questions: binary, score and Likert. Pupils then make their way out along the beach front in groups with the aim for each pupil to ask two members of the public for their answers.

Pupils then return to the beach where, using beach materials, pupils create graphs of their results. As a group the results will be discussed and, if time and diary pressures allow, presented to Cllr Steph Toogood, Mayor of Ventnor who can give the pupils feedback on what she thinks.

Skills:

- Enquiry-based learning
- Questionnaire design
- Maths (different types of data, presenting data)
- Speaking and listening to members of the public
- Responsible conduct around roads, footways etc

How clean are Island rivers?

Location: The Caul Bourne accessed via Calbourne Mill

Duration: Half Day

Before approaching the river itself, the source of the river and the path it takes to reach them is shown in the landscape. On the river bank, pupils can observe a meander bend and identify its different features while thinking about river processes. Pupils can also measure a number of river variables including width, depth and velocity by getting in the river itself. Pupils can design their own method for measuring velocity after viewing the equipment available to them. Using kick sampling, pupils can collect invertebrate life from the river and observe it, and identify it using hand lenses. Using a biotic indicator index (such as Trent) pupils can then work out whether the river is of high, medium or low pollution levels and think about where pollutants might come from in this environment.

Skills:

- Personal and group safety
- Teamwork and Leadership
- Maths (calculating velocity)
- Attention to detail (species identification)

Investigating the Rocky Shore

Location: Bembridge Forelands

Duration: Half Day

After a short walk down the beach, students will first look at different seaweeds - with a task (in pairs) to collect one example of each of red, green and brown seaweed in their sample buckets before returning to the base. They will then be shown the differences between the seaweeds with a particular focus on the ways the different seaweeds have adapted to living at the rocky shore.

Pupils will then be shown how to look for animal life at the rocky shore - both with the safety of themselves and the habitat in mind. Pupils go onto the Foreland raised beach and collect animal life in their sample buckets, before returning to the base. They will be able to show what they have found, with again a focus on animal adaptation. All animals will then be returned carefully to the shore. There is an option for students to engage in some beach art here, with small groups creating representations of some of the animals they have found.

Skills:

- Environmental stewardship (care for the animal habitats)
- Application of knowledge (understanding adaptations)
- Attention to detail (species identification)
- Creativity (beach art in different materials)

What lives in our woods and hedges?

Location: Parkhurst Forest OR your school grounds

Duration: Half Day

Pupils begin by collecting leaves from surrounding trees and then use classification keys to identify the trees they have around them. Through discussion work pupils explore the key differences between the different species and create a wax rubbing of one of their leaves - using annotations to add extra information they have learnt.

Then pupils use beating nets to collect 'minibeasts' and invertebrate species and examine these more closely using pooters and magnifying lenses. Pupils think about where insects live and how the woodland or hedgerow is a 'niche' habitat for them.

Pupils then create a woodland soundscape, by closing their eyes and really listening to the woods around them. Pupils complete the task by drawing symbols to represent the sounds they have heard in the different directions around them.

Skills:

- Observation and annotation
- Mathematical deduction (classification keys)
- Environmental appreciation
- Environmental stewardship.

Where should we build a wind farm?

Location: Headon Warren

Duration: Half Day

At Hatherwood Battery, pupils will do a 'think-pair-share' exercise on what needs to be considered before siting a wind farm (such as vegetation height and wind speed, as well as human factors such as proximity of housing). Pupils are then split into six groups, with two groups being led to each of three potential wind farm sites. At the sites, pupils will rank the site according to a number of factors, (involving both objective and subjective data) before rotating to the next site and then the third, repeating the method at each site.

On return to the base, pupils will vote on which of the three sites is most viable for a wind farm. Then students will be asked to consider the method that was used and whether some data (objective) may be more reliable than other data (subjective). Pupils will be tasked with trying to redesign an element of the method with the aim of improving the validity and reliability of the data.

Skills:

- Enquiry-based learning
- Application of knowledge to a novel situation
- Critique and justification of data collection techniques
- Understanding of bias and subjective data.

Where is the centre of Sandown?

Location: Sandown

Duration: Half Day

Sandown has undergone, and continues to undergo rapid redevelopment, especially along its beach front. While the pier used to be the 'centre' of the town, focus has started to shift towards the Sandham Gardens development at the other end of the front. Pupils will walk a short distance up Bembridge Down to look down upon the town, with its different features pointed out. Pupils will then attempt a field sketch of the view with annotations around the main features they can see. Before moving back down the slope, pupils will suggest elements of the human environment that could be measured to understand where the centre of the town is (such as noise levels, pedestrian levels etc) and hypothesise where they feel the centre will be.
Pupils will then go and survey numerous sites in rotation according to the criteria they have come up with . This will be recorded on a map using a key. They will then return to base and find out if their hypothesis was true or false.

Skills:

- Enquiry –based learning
- Maths (estimations and hypothesising)
- Teamwork and Leadership
- Field sketching and annotating
- Map reading and creating

Orienteering

Location: Parkhurst Forest or Golden Hill Country Park

Duration: Half Day

In a clearing, pupils start the activity with a warm up set of games testing how they might be able to 'read' the environment alongside a map. We can also add in some fun games that test their ability to judge distances accurately.

In small teams (3 per team is ideal) pupils navigate a series of controls around one of 3 set courses, setting off in 2 minute intervals to avoid the groups simply following each other! Pupils have to collect a series of letters, which at the end will give them an anagram to solve. This can be given a competitive edge and teams can be timed if desired.

Skills:

- Map reading (direction, scale, symbols and keys)
- Teamwork and leadership
- Accuracy - it is not always the fastest who 'wins'!
- Environmental stewardship - sticking to paths and avoiding vegetation damage
- Physical, with competitiveness if desired.

How do we use (and abuse) our rivers?

Location: East bank of the River Medina

Duration: Half Day

Starting at Seaclose Park and heading north, pupils make a number of stops along the river to see examples of how people have used the area and whether these have affected the river environment. Pupils will carry out environmental quality surveys and land use surveys to determine whether the environmental quality of the river is compromised by the way the land around the river is used. Pupils will have opportunities to discuss bias and reliability in data collection as well as the nature of subjectivity in the enquiry process.

Skills:

- Peer decision making
- Mental maths
- Environmental stewardship
- Critiquing and justifying

Are rivers a blessing or a curse?

Location: East bank of the River Medina

Duration: Half Day

Starting at Seaclose Park and heading north, pupils make a number of stops along the river to assess the impact that flooding might have on the surrounding area, introducing the idea of social, economic and environmental impacts. At the same time pupils will look at the different ways in which people use the river and how it is valuable to us and to wildlife. The session concludes with pupils forming an opinion on whether Newport needs the River Medina for its development or whether the threat of flooding means its days are numbered! Pupils will have opportunities to discuss bias and reliability in data collection as well as the nature of subjectivity in the enquiry process.

Skills:

- Peer decision making
- Mental maths
- Environmental stewardship
- Balancing differing opinions
- Observation and evidence collecting

What has made Newport the town it is today?

Location: Newport

Duration: Half Day

Starting at Seaclose Park, pupils are walked to a number of historical sites around the town looking for evidence of Newport's growth. Pupils complete land use surveys and assess whether each site is connected to the growth of Newport through trade, resources or defence. Pupils make use of historical photographs of Newport in 1880 to 1910 and hear stories of what the town was like for everyday people at that time. At the end of the session, pupils decide what caused Newport to grow and whether this will mean that Newport is likely to continue growing or go into a period of decline in the future.

Skills:

- Observations and comparisons
- Collecting evidence and processing different sources of information
- Application of knowledge (to conclusions)

How can we protect the coast?

Location: Brook beach to Monks Bay via Blackgang lookout

Duration: Full Day

The day begins by examining the different cliff falls at Brook beach, whilst viewing the difference in height and composition of the chalk and clay sections of the coastline. Travelling along the Military Road, pupils will get to see how close settlements and the road itself is getting to the cliff edge as the clay cliffs are collapsing. At the Blackgang lookout pupils will be told about the history of Blackgang Chine and the rate of erosion, and weather-permitting, view the remnants of the fairground at the cliff base.
At Ventnor, pupils will walk the stretch from Ventnor Bay to Monks Bay, taking in eight different forms of coastal defence. At each, pupils will rate the defence against a number of criteria. At the end of the walk, pupils will make a suggestion for how the cliffs at Brook beach should be protected, drawing on inspiration from what they have seen in Ventnor.

Skills:

- Observations and comparisons
- Critiquing and justifying
- Empathy with and understanding of natural processes

On the Trail of Tennyson

Location: Freshwater Bay to the Needles

Duration: Full Day

Starting at Freshwater Bay, pupils hike up to the Tennyson monument. Depending on the time of year, pupils can appreciate rare orchids, fragrant gorse and great views of Hurst Castle Spit en route - with time to stop and learn about each as desired.

At the monument, pupils will learn about the life of Alfred Lord Tennyson, poet laureate to Queen Victoria, who was said to make the daily hike up to that point during his life on the Island. The views from the peak of Tennyson Downs are said to have inspired many of his poems, one of which (The Eagle) will be performed to pupils (in character, with costume if desired!). Pupils will then write their own short poem inspired by the view and a selection of these can be performed before the group has had a picnic lunch.

After lunch, the pupils continue to walk to the Needles, and with luck will see Peregrine falcons and hear Skylarks, as well as see the 1960s rocket testing site and learn about West Wight's connection to conflict and defence. The coloured sands of Alum Bay will be viewed from the cliff top.

At the Needles Park itself, pupils can get ice creams and souvenirs if desired.

Skills:

- Literacy (poem composition)
- Public speaking and performance
- Environmental appreciation
- Physical exertion and perseverance

Leading the session:

Chloë Searl (BA Hons. PGCE, MEd, MSc, FRGS, CGeog) is an independent tutor, author, educational consultant, examiner and freelance geographer who specialises in the planning and delivery of fieldwork in all key stages. She has written award-winning lesson resources for both the Royal Geographical Society (with IBG) and the Geographical Association and produces a wide variety of free to download fieldwork guides on her website (www.theislandgeographer.co.uk). Chloë is particularly passionate about bringing innovative teaching and learning into fieldwork experiences. She is the Chair of the Geographical Association's Fieldwork and Outdoor Learning Special Interest Group and speaks about fieldwork regularly at events and conferences.