Fieldwork Pack:
Teacher notes

Fieldwork is a key way for pupils to think and act as geographers. This fieldwork pack directly links to the National Curriculum in England and will facilitate learning about Eurasian beaver populations in their local area.

**Beaver Locations in Britain**
There are a number of enclosed and wild beaver populations currently in Britain.
Use the following link to find the nearest beaver population you can visit:
beavertrust.org/places-to-see-beavers

**Purpose of this pack**
This pack contains a series of possible enquiry questions to guide your class’ fieldwork. These investigations require going out into the field in your specific locality. This pack has been designed to be adapted to fit a site where beavers live and/or have been reintroduced in your local area.

**This pack contains 4 lessons and activities:**

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<th>Lesson 1</th>
<th>Posing geographical enquiry questions</th>
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This is an outline suitable for KS1 and KS2. The enquiry questions can be adapted to different ages and situations. How the questions are approached and the specific level of appropriate detail and scaffolding/challenge included in sessions (and outcome expectations) will also need to be determined by the class teacher based on abilities and individuals.

The Geography National Curriculum (relevant to this fieldwork study) has been outlined below to provide support with determining possible adaptations.
**Enquiry Process: An Overview**

- **Introduce the investigation** by posing the **enquiry question** to the pupils.

- **How can we solve this enquiry question?**
  Plan how to investigate the enquiry question with the pupils by choosing activities suggested in this pack.

- **Go into the field:** Use a variety of **geographical skills** to investigate the enquiry question. For example, mapwork and field sketches.

- **Process and present** the information collected in the field. This will form an "answer" to the initial enquiry question posed.

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**Geography National Curriculum England Links and Progression**

**KS1 fieldwork:**

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<tr>
<th>Place knowledge</th>
<th>Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country.</th>
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<tr>
<td>Human and Physical Geography</td>
<td>Identify seasonal and daily weather patterns in the United Kingdom. Use basic geographical vocabulary to refer to key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather (and) key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop.</td>
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<tr>
<td>Geographical Skills and Fieldwork</td>
<td>Use simple compass directions (north, south, east and west) and locational and directional language ([for example, near and far; left and right]), to describe the location of features and routes on a map. Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key. Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.</td>
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<td>KS1 fieldwork:</td>
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<tr>
<td><strong>Place knowledge</strong></td>
<td>Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America.</td>
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<tr>
<td><strong>Human and Physical Geography</strong></td>
<td>Describe and understand key aspects of physical geography, including climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle and human geography, including types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.</td>
</tr>
<tr>
<td><strong>Geographical Skills and Fieldwork</strong></td>
<td>Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. Use the eight points of a compass, four and six-figure grid references, symbols and keys (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world. Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</td>
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</table>
Lesson 1: Asking geographical questions and eliciting prior knowledge

Learning Outcome
To ask geographical questions and have a clear understanding of the process of carrying out fieldwork

Child Speak
I can ask geographical questions and how to carry out geographical fieldwork.

Activity 1

Pupils can begin their fieldwork study by asking their own geographical questions and thus acting as geographers. Give pupils a range of photos of a local section of the river, where beavers are present. This could include sections of the river without beavers, sections where dams have been made and also a photograph of a beaver on the river.

See examples below:

The aim of this first activity is to spark curiosity, interest and enthusiasm for the new fieldwork study and for pupils to understand that fieldwork studies can start with a question, to which an “answer” can be found.

It will be possible to determine pupils’ prior knowledge through the questions asked, but supplementary questions, such as the examples below, could be asked to further determine prior knowledge:

1. What features of the river do you notice in Picture 1? What features of the river do you notice in Picture 2?
2. What is the difference between the river in Picture 1 and Picture 2?
3. What animal is shown in Picture 3? What are they doing?

Use the pupil’s prior knowledge to steer future enquiry and necessary levels of scaffolding/challenge. Information can be recorded and be reflected upon in the final lesson.
Introduce the investigation by posing one enquiry question to pupils.

To achieve a focused result of this enquiry, it is suggested that all pupils follow one line of enquiry and work together on the investigation. Choose from the following suggestions.

The following questions are broad and possess lots of potential for pupils to engage in field sketching and drawing on their knowledge of the features of a river (see Beaver Trust KS2 Geography Lesson Pack).

1. Where do beavers live?
2. What are beavers habitats like?

The following questions are more specific and aimed at KS2+. With these questions, there is potential for pupils to engage in making and carrying out questionnaires, field sketching and also drawing on their knowledge of features of a river (see Beaver Trust KS2 Geography lesson pack for Rivers Scheme of Learning).

3. What do people think of beavers?
4. How do beavers help with flood mitigation?
5. How do beavers help with drought?
6. How can beavers help us in a climate emergency?

The URL below links to a PDF with beaver facts and beaver-related questions and answers:
beavertrust.org/FAQ-pdf

These fieldwork enquiry questions are designed to be open-ended to facilitate various lines of investigation/the ability to use a variety of fieldwork methods.

The enquiry question that is used for your fieldwork could also be:

- A question asked by a pupil as a result of the first images (see Activity 1)
- A question that encompasses/combines pupils’ questions from Activity 1
Lesson 2: Planning fieldwork

<table>
<thead>
<tr>
<th><strong>Learning Outcome</strong></th>
<th>To plan fieldwork which will observe, measure, record and present the human and physical features in the local area.</th>
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<td><strong>Child Speak</strong></td>
<td>I can plan fieldwork linked to my local area.</td>
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**Activity 1**

Plan how to investigate the enquiry question with pupils:

1. **How can we solve this enquiry question?**

2. **How are we going to collect our data?**

Before carrying out their fieldwork, pupils need to “think like a geographer” and consider ways that they can investigate their enquiry question.

There are a range of ways to conduct fieldwork. Here are some suggestions:

1. **Sketch maps** of different points along a river with a beaver population (labelled)

2. **Annotating an OS map** with information gathered from the field. For example, listing what can be seen at different points along a river and labelling these according to their location on a map.

3. **Hand drawing a map** (birds-eye/aerial view) whilst in the field to indicate spatial information

4. **Questionnaires** (useful for deciphering public opinion)

5. **Tally charts:** for example, tallying visitors to an area, evidence of beaver activity etc.

Pupils need to know how to conduct selected fieldwork methods prior to going into the field.
Where is our fieldwork taking place?

Pupils need to visualise/be aware of where they are going to conduct their fieldwork prior to leaving.

It is advised that pupils have access to a map of the fieldwork site whilst conducting their fieldwork, in order to make connections between the map (symbolic) and the field itself.

There are different types of digital mapping software available now, which can be projected onto an interactive whiteboard or for pupils to access through a laptop/tablet. Services like Digimaps for Schools also provide an option to plot routes and print out sections of OS maps, which can then be taken into the field.

Geographical Skills: Map Reading

This is also a good opportunity to discuss different map skills with pupils, such as:

- Compass directions (4 to 8 points of a compass: north, south, east and west, plus NW, SW, NE, SE) and locational and directional language (for example, near and far; left and right)
- Grid references (4 and 6-figure grid references)
- Using symbols and a key on an OS map
Lesson 3: Collecting data in the field

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>To use fieldwork to observe, measure, record and present the human and physical features in the local area.</th>
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| Child Speak      | I can carry out fieldwork linked to my local area. I can collect data, which will help to answer my enquiry question. |

Collect data in the field: use a variety of geographical skills to investigate the enquiry question. For example:

1. **Sketch maps** of different points along a river with a beaver population (labelled)

2. **Annotating an OS map** with information gathered from the field. For example, listing what can be seen at different points along a river and labelling these according to their location on a map.

3. **Hand drawing a map** (birds-eye/aerial view) whilst in the field to indicate spatial information

4. **Questionnaires** (useful for deciphering public opinion)

5. **Tally charts**: for example, tallying visitors to an area, evidence of beaver activity etc.

It is suggested that the pupils take a walk from point A to point B to conduct their fieldwork.

It is crucial to conduct a thorough risk assessment because it will be necessary to be in close proximity to a river.
Lesson 4: Processing data and presenting results

Learning Outcome
To use, process and present fieldwork data to develop an understanding of human and physical features in the local area.

Child Speak
I can process and present the data I collected on my field trip. I can form an answer to my enquiry question.

Processing Data
The aim of processing data is to form an answer to the initial enquiry question posed. How data is processed depends on the way data was collected in the field.

For example:

1. **Sketch maps** made in the field could be arranged and presented in order of their occurrence along different points of the river studied with a beaver population (labelled).

2. **If tally charts were used** in the field (for example, tallying visitors to an area, or evidence of beaver activity), pie charts could be used to visually represent pupils’ findings.

3. **Answers from questionnaires** (useful for deciphering public opinion) could also be visually presented, for example through various forms of charts (bar/pie).

Presenting Data
It is very important that pupils refer to the overarching enquiry question at the end of the unit and share their answers based on their fieldwork experience and findings.

For example, if pupils selected the following enquiry question:

**What are beavers’ habitats like?**

Pupils may wish to share their findings in the following ways:

- Planning a visitor route for others to discover this specific beaver habitat
- Make a visitor guide, which describes what visitors should expect to see in the specific location and information about what they will find.
- Plan and film a TV report, which includes their findings in a specific area.
- Make a detailed land use map, with their own symbols/key, with reference to beaver activity (which could be used by visitors to the area).