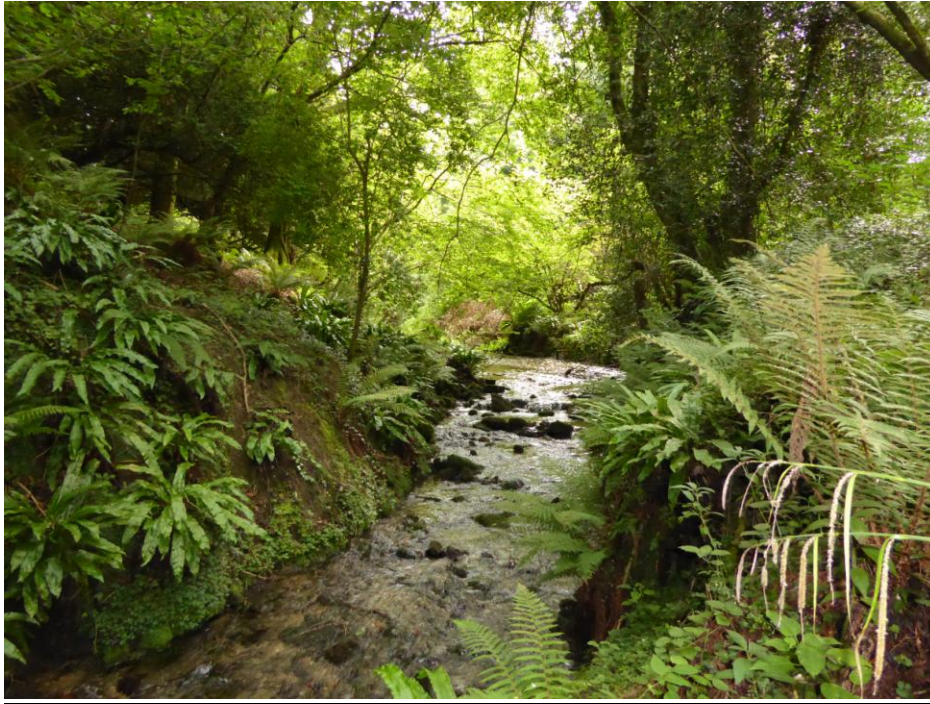


## Case Study: Botany Bay



Botany Bay is an area of ancient woodland with a beautiful chalk stream running through it, which is home to a small population of native brown trout. Here river features such as meander, flow, waterfalls, pools and banks, can be seen. There are opportunities for pond dipping and kick sampling in the stream. The woodland provides areas for plant identification and mini beast hunting. Above all Botany Bay is a quiet place for reflection and creative work.

# Contents

Information For Schools

Suggested Learning Outcomes

Pre/ Post Visit Ideas

Map

Field Sketch

Botany Bay River Corridor Survey

Botany Bay Fresh Water Pond Invertebrates

Minibeasts In Woodlands And Grasslands

Field Site Visit Assessment Form

Risk Assessment Record

Emergency Details And Other Assessment

## Information for Schools

### Permission to use the site

Please contact Botany Bay Conservancy, Anne Dennig, 01798 867 261 The Garden Cottage, Lavington Park, Petworth, West Sussex, GU280ND.

### Things to take on site visit

Clip boards and pen/pencils

OS map

Site maps

A4 paper and pencils for field sketch

Camera

Compasses

Tape measures

Dog biscuits

Sweep nets /sheet

Pond nets

River survey recording charts

# Suggested Learning Outcomes

## Suggested Learning Outcomes based on the new NC 2015 (Geography and Science KS2)

Children will be able to:

### Geography

- Use a map to identify East Lavington stream and identify river features
- Describe key features of the stream at Botany Bay (such as meander, flow, waterfalls, river channel, pool and bank)
- Use a compass to orientate a field sketch and direction of flow
- Use fieldwork to observe, measure and record:
  - ◆ River speed by measuring and investigation
  - ◆ River landscape by survey and field sketch
  - ◆ Human features in the landscape

### Science

- Identify and study plants and animals in their habitats
- Discover how human impact has changed/is changing Botany Bay
- Use a classification key to help group, identify and name a variety of living things in the local environment

## **Pre/Post Visit Ideas**

### **Pre visit ideas for schools**

Find Botany Bay on an Ordnance Survey map. Use the map to describe what the area looks like.

Discuss ways of recording observations of wildlife and human impact. Look at completed recording grid examples.

Look at web sites and share information with the class.

<http://www.parksandgardens.org/places-and-people/site/2026?preview=1>

### **Post visit ideas for schools**

Evaluate the river speed experiment.

Calculate river speed in metres per second.

Complete/annotate/colour Field Sketches and compare to photographs (if taken).

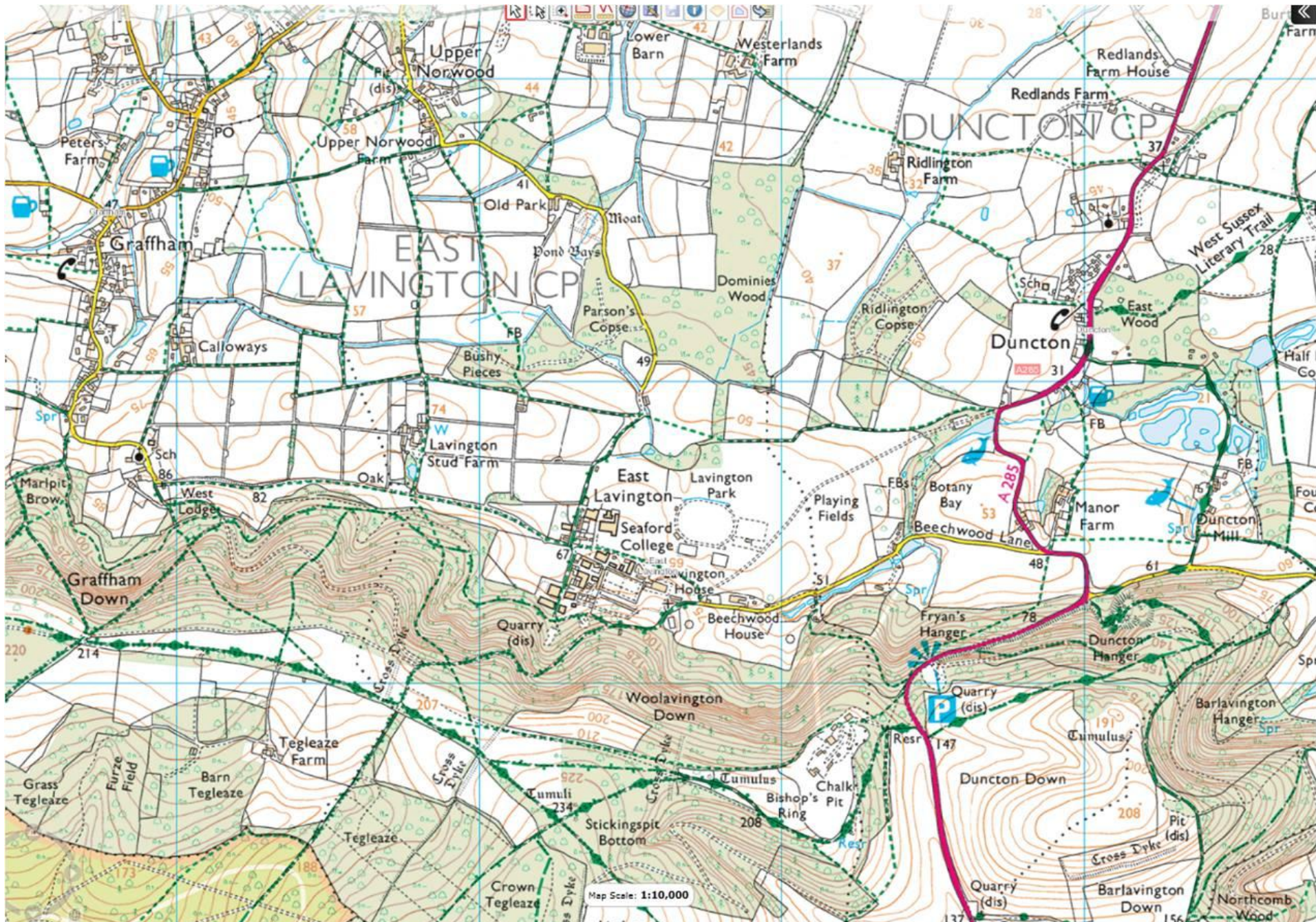
Make a Nature Guide / Visitor Guide to Botany Bay.

Prepare a Class Big Book about the day.

Use the Trail Map (if available) to make an annotated map of the site as whole class activity.

Collate whole class results of the Habitat Survey (if done) and prepare display using annotated map, photographs and results chart.

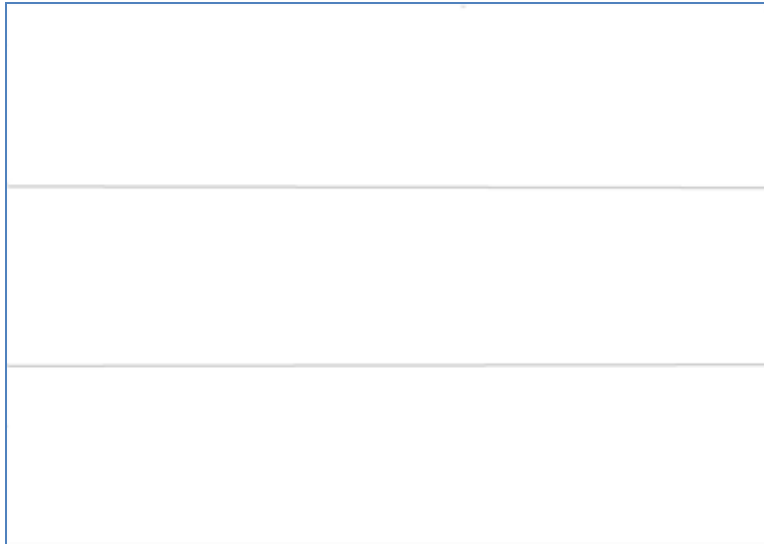
# Map



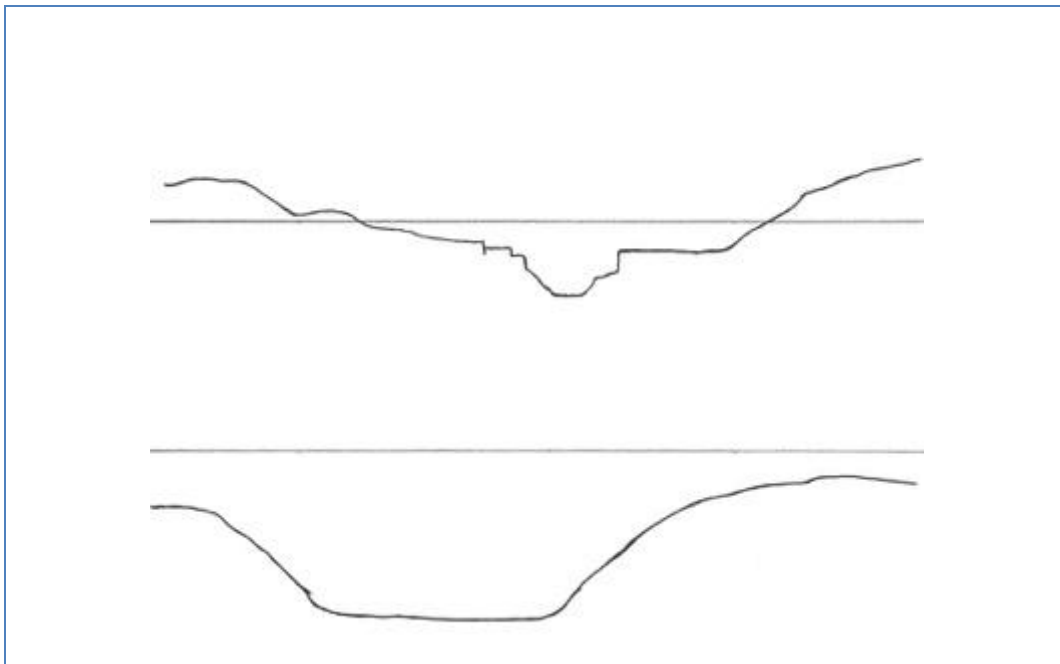
## Field Sketch

The following instructions have been written to support the learning of students visiting Botany Bay.

Draw 2 lines lightly, approximately dividing the page equally into 3 parts.

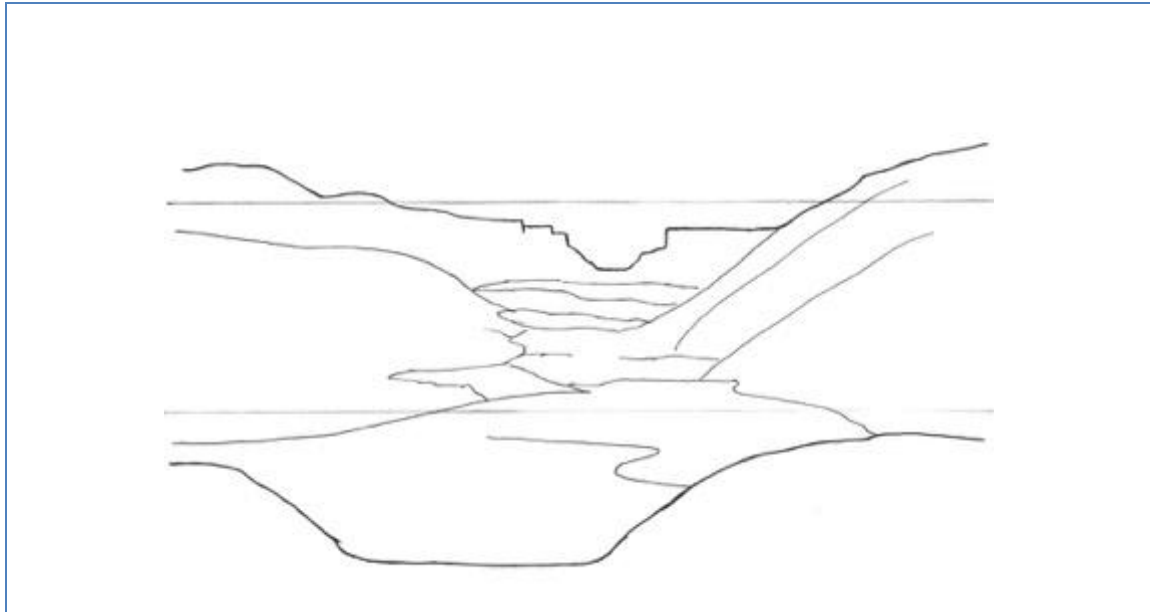


Looking at the landscape view draw in the HORIZON using the top line as a guide. Draw what you can see in the far distance e.g. Hills at the top. Draw things nearest to you at the bottom of your sketch.

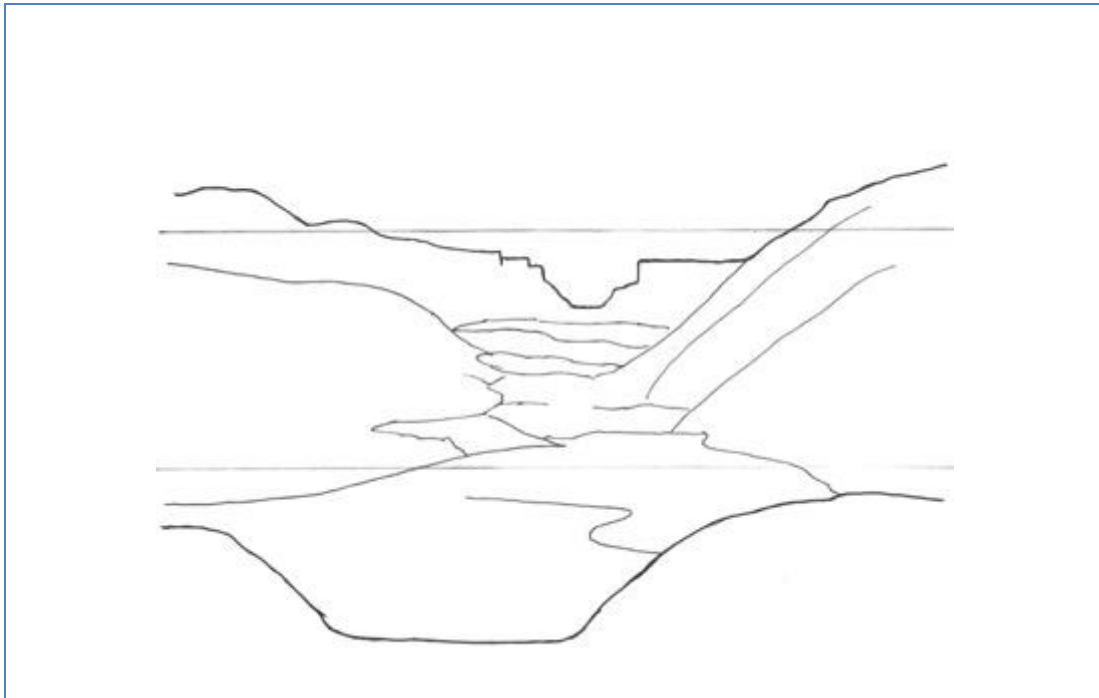


## Field Sketch

Draw in the “middle ground” downwards from the horizon line. Remember, the nearer something is the more detail you can see.



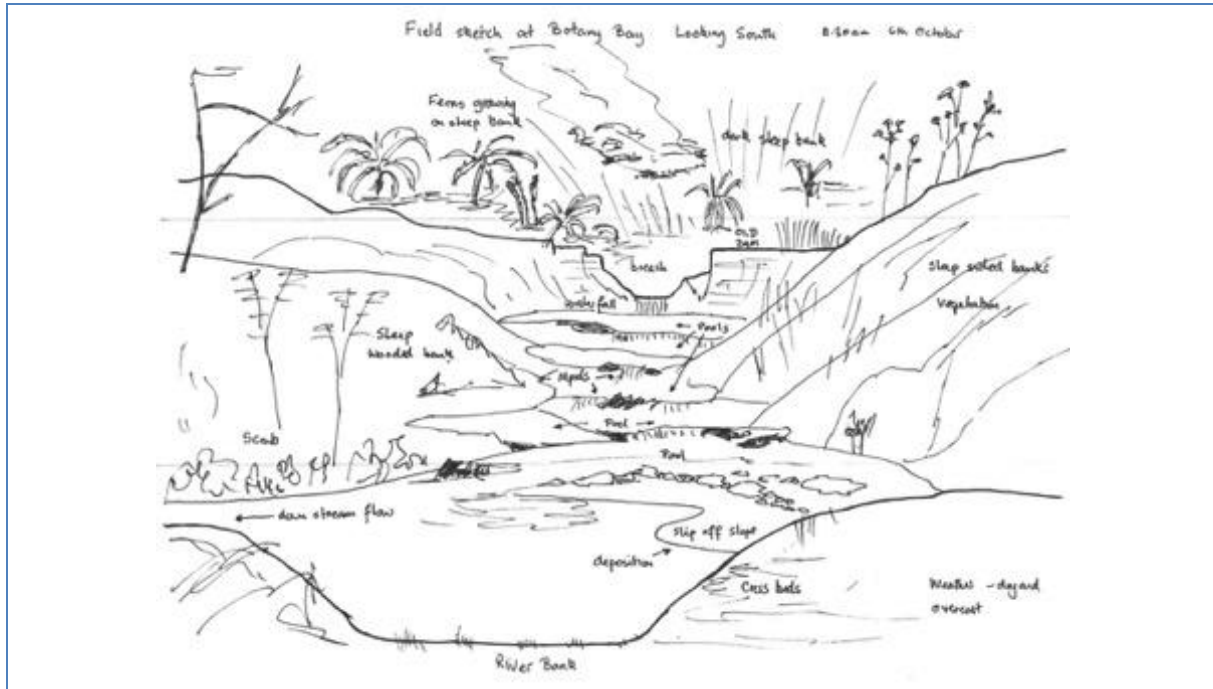
Draw in anything that you can see!



If it doesn't look like what it should then label it. You can add extra details, such as the place, time, date, weather, direction. Don't forget to put your name on your field sketch.



## Field Sketch









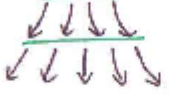















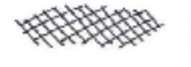
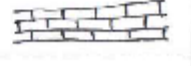
Do you recognise this photo?

Compare this to the field sketch. Why is the field sketch a really useful way of recording this special place?



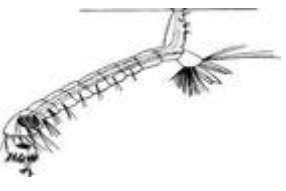

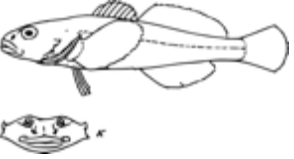
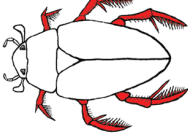



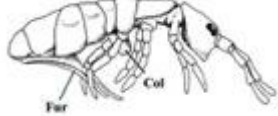


# Botany Bay River Corridor Survey


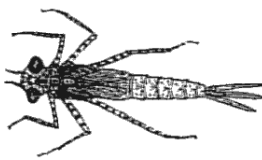

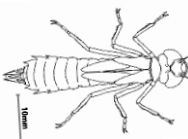
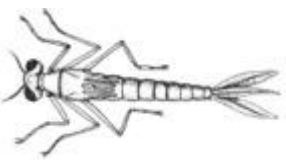
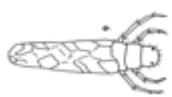




River Corridor Survey Key

Vegetation		Deposition features		Erosion features		Non-natural Features	
Grass		Mud		Rock cliff		Fence	
Emergent plants		Sand		Slip slope		River crossing: bridge	
Submerged plants		Gravel		Steep-sided bank		ford	
Scrub		Cobbles		Plunge pool		Path/track parallel to river	
Tree						Water control features: weir	
Woodland						sluice gate	
Hedgerow						Dredged bank	
						Bank-side defences: soft eg geotextiles	
						hard eg concrete	

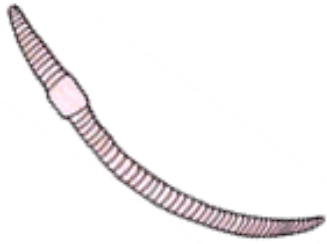
# Botany Bay Fresh Water Pond Invertebrates

<p>fresh water shrimp</p> 		<p>water mite</p> 	
<p>mosquito larva</p> 		<p>midge larva</p> 	
<p>bullhead</p> 		<p>diving beetle</p> 	
<p>pond snail</p> 		<p>great water boatman</p> 	
<p>water louse</p> 		<p>aquatic springtail</p> 	

# Botany Bay Fresh Water Pond Invertebrates

<p>ramshorn snail</p> 		<p>damselfly larva</p> 	
<p>leech</p> 		<p>dragonfly larva</p> 	
<p>alder-fly larva</p> 		<p>caddis larva</p> 	
<p>mayfly larva</p> 		<p>phantom midge larva</p> 	
<p>pea mussel</p> 		<p>water flea</p> 	

# Botany Bay - Minibeasts in Woodland and Grassland



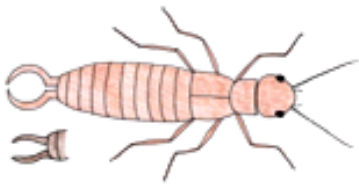
worm



snail



slug



earwig



hoverfly



beetle



harvestman



spider



millipede



















centipede



woodlouse

# Botany Bay - Minibeasts in Woodland and Grassland

 <p>aphid</p>	 <p>frog hopper</p>	 <p>flower bug</p>	 <p>shield bug</p>
 <p>weevil</p>	 <p>beetle</p>	 <p>ladybird</p>	
 <p>ant</p>	 <p>cricket</p>	 <p>grasshopper</p>	
 <p>moth</p>	 <p>caterpillar</p>	 <p>butterfly</p>	
 <p>cranefly</p>	 <p>dragonfly</p>	 <p>damselfly</p>	

# Fieldwork Site Visit Assessment Notes

**Site:**..... **Date initial assessment:**.....

*2<sup>nd</sup> brief assessment prior to (within 2-3 weeks) school visit recommended*

**Site Contact:**.....

**RSPB Education staff (2 recommended)**.....

Contact number for the school visit day
Barrier/gate code
Coach access
Coach parking for drop off
Coach parking for the day
Safe place for children to get off/on
Field teacher parking
Access by rail
Access on foot/local schools
Toilet facilities
Disabled toilet

## Fieldwork Site Visit Assessment Notes

Shelter/classroom
Area for lunch
Area for lunch if wet
Areas of shade
Access around site - paths/grass/mud
Access with sheep/cows
Dogs
Disabled access around site
Booking facility for schools
Information for schools document
Site map
Risk assessment
Site staff/volunteers to lead fieldwork days
Site interpretation – boards/models



## Fieldwork Site Visit Assessment Notes

River access for speed/flow / risk

Place for River Survey/observing features

Landscape features

Field Sketch – place/direction

Water clarity / risk

Kick sampling / risk

Ditch profile /risk

Pond dip /risk

Trail map/map work

Hide/viewing area

## Fieldwork Site Visit Assessment Notes

Habitats and activities

Human impact/conservation

Other activities/areas of interest

Activities/information site staff would like included

Times to get around site

Resources available/required on site

Resources for Case Study

## Botany Bay - Risk Assessment Record

	<b>RISK ASSESSMENT RECORD</b>
	<b>Activity/Workplace Assessed: School Visits to Botany Bay</b>

<b>Assessor: Nigel Lord</b>	<b>Assessment Date: 06/10/2015</b>	<b>Manager:</b>
-----------------------------	------------------------------------	-----------------

The three columns (L,S,R) are for assessing the level or degree of risk. The first (L) is for an assessment of the likelihood of the hazard taking place, the second (S) for the severity of the hazard, both based on the following:-

**(L) LIKELIHOOD**

**(S) SEVERITY OF HAZARD**

**(R) RISK LEVEL** is product of Likelihood and Severity (LxS).

1. Hazard exists very infrequently; limited numbers exposed
2. Likely to occur; hazard exists intermittently or occurs occasionally
3. Likely to occur soon; permanent hazard or occurs daily / repeatedly; many may be exposed

1. Could cause minor injury only
2. Could cause major injury/3 day or more absence
3. Could cause fatality/severe injury

- Very high risks score 6 or 9  
 Moderate risks score 3 or 4  
 Low priority risks score 1 or 2

**VERY HIGH RISKS NEED IMMEDIATE ACTION**

HAZARD potential for harm	Persons Affected	PRECAUTIONS/CONTROLS already in place to remove hazard, reduce risk level	RISK (with controls)			✓ Additional Controls Needed. Details Over
			L	S	R	
VEHICLES movement of at drop off area and road to Seaford College	All	Accompanying teachers/group leaders have been for a pre-visit and are aware of the layout of the drop off area; they are responsible for the supervision of the children from coach to the site.	2	1	2	

## Botany Bay - Risk Assessment Record

HAZARD potential for harm	Persons Affected	PRECAUTIONS/CONTROLS  already in place to remove hazard, reduce risk level	RISK (with controls)			✓ Additional Controls Needed. Details Over
			L	S	R	
<b>UNEVEN SURFACES</b>  Slips, trips and falls	All	Route will be pre-checked prior to the school/group visit. All are given a safety talk at the beginning of the visit to advise of potential hazards, wet grass, mud, shrub/tree stumps, etc. All are instructed not to run around the site and to stick to the paths. In the pre-visit the teachers/group leaders are advised to make sure the children wear suitable sturdy footwear.	1	1	1	
<b>STRANGER DANGER</b>	Children	Children are supervised at all times and are instructed to stay together in their groups. They are put into small groups when they arrive and head counts are carried out throughout their visit.	1	1	1	
<b>LOST CHILD</b>	Children	Follow visiting school's Lost Child Procedure	1	1	1	
<b>CONTACT WITH ANIMALS: WILDLIFE</b>	All	Children are instructed not to touch or approach animals and to be quiet when wildlife is particularly close.	1	1	1	
<b>TOXIC PLANTS / BERRIES</b>	Children	Children are advised not to pick or eat anything on the site. All are instructed to thoroughly wash their hands/use hand sanitisers prior to eating lunch.	1	2	2	
<b>ACCIDENTAL ENCOUNTER WITH ADDERS</b>	All	Groups made aware of potential presence of adders.	1	2	2	
<b>CONTACT WITH LIVESTOCK OR WILD ANIMAL DROPPING</b>	All	There are no hand washing facilities on site. School/group staff to provide wipes/sanitising gel as appropriate.	1	2	2	

## Botany Bay - Risk Assessment Record

HAZARD potential for harm	Persons Affected	PRECAUTIONS/CONTROLS  already in place to remove hazard, reduce risk level	RISK (with controls)			✓ Additional Controls Needed. Details Over
			L	S	R	
<b>TICK BITES</b>	All	Walking in tall vegetation is avoided. School teachers/group leaders should be aware of how to identify ticks and how to remove them.	1	2	2	
<b>ADVERSE WEATHER</b> – Wet / Cold / Too Hot / Too windy for woods	All	During the pre-visit teachers are advised to ensure that everyone arrives wearing sensible/ practical clothes for a day outdoors. i.e. sun hats, coats and wet weather gear. Sunscreen if required is to be brought and administered by the school/group or individuals. The activity program will be altered if the weather is deemed too adverse.	2	1	2	
<b>FALL IN RIVER:</b> Drowning/exposure	All	Children working on the riverbank must stay behind the designated line and keep away from steep banks. Children work in groups each with a supervising adult. Clear instructions and safety talk are given before activity, with close supervision during activity. Throw line is available, ready for use, shown, and use of is explained.  Spare clothes are to be brought by the school. This is to be highlighted with staff at pre-visit meeting  Foil emergency blanket in warden/field teacher's first aid kit.	1	3	3	

## Botany Bay - Risk Assessment Record

HAZARD potential for harm	Persons Affected	PRECAUTIONS/CONTROLS already in place to remove hazard, reduce risk level	RISK (with controls)			✓ Additional Controls Needed. Details Over
			L	S	R	
<b>POND DIPPING/KICK SAMPLING -</b> Drowning/exposure	Children	A safety talk and full instruction is given at the start of the session.  Children are supervised at all times.  Nets and equipment has been safety checked prior to the children's visit.  Children work in pairs and only those holding the net are allowed down to the water's edge at any one time, so a maximum of 8 children. Adults are placed at either end of the dipping platform when the youngest children are dipping.  In the unlikely event that a child should slip in, the reverse end of the dipping net would be used as a rescue pole.  Foil emergency blanket in Field Teacher's 1 <sup>st</sup> aid kit at pond side.  Spare clothes are to be brought by the school/group. This to be highlighted with staff during pre-visit meeting.	1	3	3	
Water-borne infections	All	All open cuts and abrasions to hands are to be covered prior to dipping. A first aid kit with spare plasters is carried by the school teachers/group leaders and by each Field Teacher (on request).  During the initial safety talk and throughout the session all children are instructed not to put their fingers in their mouths or up their noses after they have had their hands in the water.  Hand washing facilities are available on return to the visitor centre.  School/group staff to provide wipes/sanitising gel as	1	2	2	

## Botany Bay - Risk Assessment Record

HAZARD potential for harm	Persons Affected	PRECAUTIONS/CONTROLS  already in place to remove hazard, reduce risk level	RISK (with controls)			✓ Additional Controls Needed. Details Over
			L	S	R	
<b>MINIBEAST HUNT:</b> crush injuries from log and stone piles  Sweep Netting  <b>Risk of bites and scratches</b>  Shaking trees/bushes  Risk of thorns and falling debris	All	Full instruction and a demonstration is given at the beginning of the activity on how to carefully move logs and stones without squashing fingers and toes as well as avoiding strains. Children should be directed to lift logs in pairs.  Children work in small groups with an assigned adult.  Spoons are used to collect the minibeasts, so as to avoid any handling of the creatures by the children.	1	1	1	
	Children	Instruction and demonstration is given for using nets. Children are instructed to avoid contact with others and not to run with the nets.  Children are given a boundary of where they are allowed to sweep so as to avoid the water edge and long thistly grass (It is recommended that children should wear long trousers to lessen risk of bites and scratches).	1	1	1	
	All	They are closely supervised at all times  Children are stood well clear of any tree/bush when it is shaken by adults. Adults who shake the tree/bush should be aware of species prior to shaking, e.g. Blackthorn/Hawthorn (sharp spikes). Children supervised and instructed in shaking the tree away from other people. Anyone watching is well clear to avoid items getting into eyes	1	1	1	

# Emergency Details And Other Assessments

**Safety Equipment needed:** First aid kit, safety throw line, hand wipes

## EMERGENCY INFORMATION

<p><b>Nearest telephone:</b></p> <p><b>Seaford College School Office: 01798 867 392</b></p> <p>All group leaders/field teachers to carry a <b>fully charged</b> mobile phone.</p>	<p><b>Nearest A&amp;E Department:</b> <b>Botany Bay</b></p> <p>St Richard's Hospital Spitalfield Lane Chichester West Sussex PO19 6SE</p> <p>01243 788122</p> <p>Small Injuries Clinic Haslemere Minor Injuries Unit, Church Lane, Haslemere GU27 2BJ</p> <p>01483 782 334</p>	<p><b>Quality of mobile phone reception:</b></p> <p><b>Variable, strong 02 signal in places</b></p>
<p><b>Access point for emergency services:</b></p> <p>Seaford College (Duncton entrance), pull in after white gateposts 500 metres from turn off.</p>	<p><b>Type of access for emergency services:</b></p> <p><b>Normal:</b> Yes    <b>4WD:</b> Yes <b>Air:</b> Yes</p>	<p><b>First Aid cover levels:</b></p> <p>Field teachers: Paediatric First Aid Schools/groups to provide to their required levels</p> <p><b>Where provided?</b></p> <p>School/group staff to do First Aid for children</p> <p>Field teachers to do for themselves, and for children in an emergency</p>