Funded by Defra's Aggregates Levy Sustainability Fund, administered by English Nature.

Contact: info@ukrigs.org.uk

INTRODUCTION

☛On the journey (See TED3 location and access)

On the journey to Tedbury pupils should be encouraged to look out for ways in which stone is being used in the environment. This can be seen in walls, buildings, roads and concrete. If this topic has not been part of the preparation for the visit, it should be covered in the follow-up. If the visit to Tedbury is linked to a visit to East Mendip Study Centre at Whatley Quarry the uses of limestone will likely be included in their programme. Visitors travelling through Midsomer Norton and Radstock may notice the tips of old coal mine waste, mostly shale/mudstone.

☛Items to bring on the Visit

Appropriate waterproof clothing & stout footwear. Wellies are easy to clean, but difficult to climb the steep slopes up to Tedbury Camp. First Aid kit.

Enough copies of the worksheets/notes etc. selected by the group leader:

*Quarry Map and Site A **pupil activity sheet.1** – a first look at the quarry.
*Site B **pupil activity sheet 2** – View from 20m.
*Site B **pupil activity sheets 3, 4 & 5** – A close look at the rocks.
*From Site B to C **pupil activity sheet 6 & 7**– A close look at the Quarry floor.
*Site C **pupil activity sheet 8**, **9 & 10**– On the edge.
*Site D **pupil activity sheet 11** – Plants taking over.

An optional worksheet combination is activity sheets 1 with 12, the Summary pupil activity sheet which summarises a lot of the work in activity sheets 2 to 11.

Plus: Notebook, sketchbook, camera, magnifiers, water dropper bottles, tape measure, small ruler, piece of millimetre graph paper [laminated], compass and materials for any other fieldwork activities.

Teachers and adult helpers should each have dropper bottle containing dilute acid for testing limestone. Domestic lime de-scaler may be used, and should be diluted to adequately react with limestone [try x 10 dilution] . Tissues should be kept handy in case of spillage.

Equipment for collecting soil samples.

☛On Arrival

If the fieldwork includes a visit to East Mendip Study Centre at Whatley Quarry, teachers should follow the guidance given by the teaching staff. **With advanced notice**, arrangements can be made for access by children with special physical needs.

For independent groups arriving by coach, the nearest place to park is just west of the church in Great Elm, on the minor road from Mells to A362 NW of Frome. (See **TED3 location and access**). Opposite the church, walk 300m down Elm Lane and cross the bridge over the Mells River at Fordbury Bottom. Notice the use of stone in buildings and the bridge. Most show signs of weathering.

For independent groups arriving by minibus, parking is available beyond Great Elm, down the very narrow Elm Lane, beyond the bridge by the roadside at Fordbury Bottom [ST747484].

There are currently no toilets on site.

Remind the children of Health & Safety issues.

Avoid dog poo on the site.

Earth Science On-Site Trail

☛ Using the pupil activity sheets

The Earth Science teaching trail and pupil activity sheets are very detailed, as there is a lot of information to be found in the rocks. In the notes for each locality there are teaching points related to key observations and interpretations on the formation of rocks, and soils, with additional reference to wildlife. The pupil activity sheets are linked to these observations/teaching points. **Teachers will need to decide which combination of materials are appropriate for their pupils to use and select or adapt the sheets accordingly.**

There are plenty of opportunities to record information by taking photographs, sketching, mapping and note-taking to aid follow-up work. When soil samples are taken, the location of each sample should be marked on the map and on the collecting container.

For some children it may be useful if an adult helper acts as a "scribe", recording the agreed answers on a copy of the activity sheet. All should complete their own sheets as part of follow-up work, as an individual record of the work they did on their visit.

Key points to investigate

We are looking for three lines of evidence from these exposures of rock:
1 - to find out how the different rocks were formed;
2 - to find out what happened to the rocks after they were formed;
3 - to find out what is happening to them today or in the recent past.

☛ The walk up to Tedbury Camp (See Figure 1)

Notice the use of limestone in buildings in the village and the bridge over the River Mells at Fordbury Bottom. Some blocks in the bridge show signs of weathering, with cavities where shells have been dissolved away by acidic rainwater.

Useful points about the work of rivers cutting their valleys in the natural landscape can be made at Fordbury Bottom and on the 350m walk to Tedbury Camp Quarry. Look to see what makes up the bedload [pebbles and sand, with deposited mud]. If this is disturbed the mud can be seen to be the suspended load! There is also lime dissolved in the water as the soluble stream load.

At Fordbury Bottom go through the gate and follow the old rail route west [upstream]. Just before the modern railway track from Whatley Quarry, turn right across the footbridge over Fordbury Water [a tributary of the Mells]. Upstream there are cages of rock placed beside the stream. These are called gabions. Ask the children to suggest why they have been placed here. These reduce the erosion of the banks and provide a reasonably dry footpath.

The path leaves the stream and passes through a wooded area for 100m. Where the path forks bear right and scramble up the gradually steepening path to Tedbury Camp at the top. (See **Figure 1**) This path acts as a gully when rainwater quickly builds up and flows down it, making it deeper and washes pebbles, sand and mud down.

Economic aspects of the uses of limestone can be made on the return.

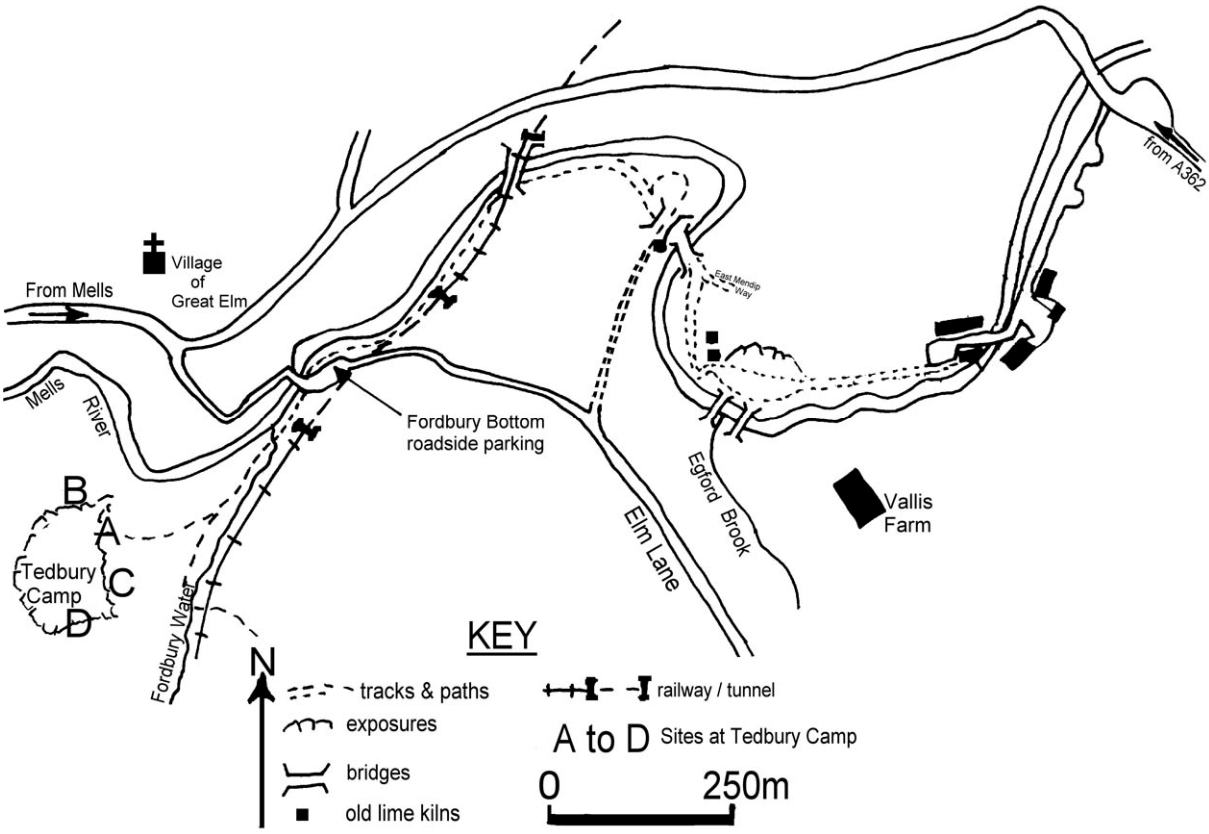


Figure 1. Site map of the area around Tedbury Camp.

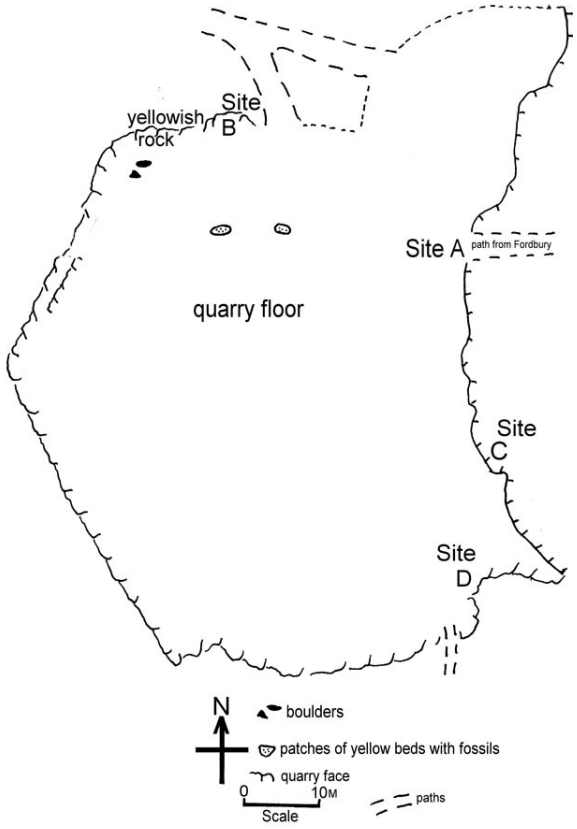


Figure 2. Map of Tedbury Camp.

Tedbury Camp Quarry
Step up onto the ledge which forms the quarry floor and look around. This viewpoint is **Site A**.

At the far side of the quarry is a yellowish, 160 million year-old limestone of Jurassic age, called the Inferior Oolite, so-called because the stone is not as good as the Great Oolite. It is made mostly of the mineral calcite in the form of ooliths, which look like fish eggs [oo-lith = egg stone]. Its sedimentary origin is clear from the layering and presence of fossil seashells.

The quarry floor is made of older, harder, Carboniferous Limestone which was tilted and planed flat before the Oolitic Limestone was deposited. The tilting can best be seen at the edges of the quarry. The sedimentary origin of the Carboniferous Limestone is clear from the layering and presence of fossil seashells.

☛The teaching trail notes which follow incorporate the pupil activity sheets with teaching points, answers, interpretation and other comments. Copies of the activity sheets can be found in **TED8 Pupil Activity Sheets**. The first two localities can accommodate large groups, but **Site C** is best with up to 15 students. Teachers will need to split a large group and incorporate an additional activity at **Site D**, related to the plant colonisation of the un-cleared southern part of the site.

Completed copies of all the activity sheets with answers can be found in TED9 Field Notes

Site A. Pupil Activity Sheet 1: Activity 1.
Help the pupils to:
Use a compass to find North. Mark North [or **N**] on the compass rose on their map.
Circle site A, your first view of the quarry.
Remind pupils that at each later stop they will need to check and mark their map.

Pupil Activity Sheet 1: Activity 2. Look west to the main faces of yellowish rock (Site B).

Questions/Teaching points	Answers/Interpretation/Comments
What clues can you see that tell you that this was a quarry and not a natural landscape?	Flat quarry floor. Cliff faces cutting into the land surface, through soils and rocks. No stream or river which might have been responsible.
Which TWO of these words best describe the yellowish rock in the faces? Layered; Jumbled up; Level, [horizontal]; Tilted [sloping]	Layered Level/horizontal
You should be able to see material at the base of the faces. What do you think this is made of? Where has it come from?	This is scree. It is made of broken rock fragments weathered from the faces and fallen by gravity.

☛Now we can take a closer look. You will need copies of **Site B Pupil activity sheet 2. - View from 20m.** Move the group 30 metres West-North-West towards site B [Children could check this direction with compass]. Stop at about 20 metres away from **Site B** to label the field sketch. Alternatively, this activity could be completed AFTER the main **Site B investigation: Pupil activity sheet 3 – A close look at the rocks.**

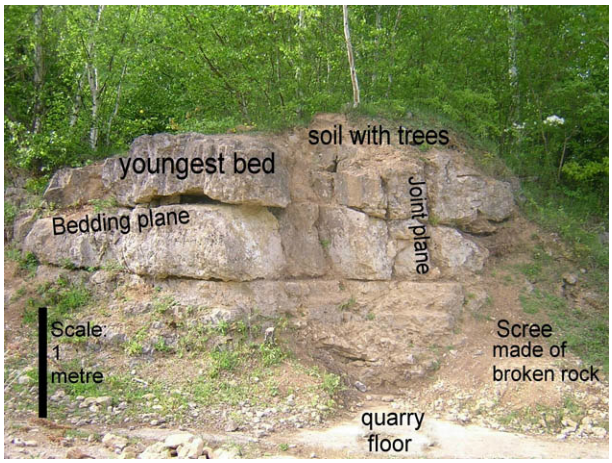


Figure 3. Site B.

Match this photo with what you can see in the cliff face. Rock layers are called beds.

Site B. Pupil Activity Sheet 2: Activity 3.

Help the pupils to mark the following on their field sketch:

Youngest bed [You might have done an activity in school to help you to answer. This is the sedimentation activity – oldest at the bottom, youngest at the top];

Soil with trees; **Scree made of broken rock;** **Quarry floor**

Use the scale bar to find the height of the cliff face to the nearest metre. (Teacher may wish to check this later with a measuring tape at a safe place.)

Circle site B on your map on activity sheet 1.

☛ Continue to the rock face at **Site B** to take a closer look at the rocks.
You will need copies of **Pupil activity sheets 3, 4 & 5 – A close look at the rocks,** a magnifier, small piece of 1mm graph paper, dropper bottle of water, dropper bottle of dilute acid.

Site B. Pupil Activity Sheet 3: Activity 4. Let's take a closer look at the rocks either in the face or the many loose pieces lying around.

Questions/Teaching points	Answers/Interpretation/Comments
Describe a piece of the rock.	Yellow colour, made of grains stuck together.
What happens when you rub the rock with your fingers?	Some grains may rub off.
Look at the main grains in the rock with a magnifier. Describe the shape of the grains: rounded, angular or in between.	Mostly rounded.
Describe any others you can see, helping to stick the grains together.	Smooth yellowish clay helps. Some grains of quartz sand are also present.
Measure the size of the grains: Over 1mm, about 1mm, under 1mm. [1mm graph paper is useful]	Mostly about 1mm, a few over 1mm.[the size of fish eggs. Anyone seen caviar??] [Ruler could be used]
Test the creamy rock with a drop of dilute acid. What happens?	It fizzes.
The rock is made of tiny balls of lime, the size of fish eggs. It was originally lime mud, made mostly of the mineral, calcite, which rolled around on the seabed like a tiny snowball, picking up lime mud as it rolled around. What name can we give to such a rock containing so much lime?	Limestone.
You might be able to find fossil shells of sea creatures. What does this tell us about where these rocks were formed?	It was formed in the sea. (You may find brachiopods, bivalves etc.)
Try to explain why the rocks are layered. [You might have done an experiment in school with water and sediments like sand and mud]	Lime, sand and mud was washed about and settled out in water. [See later for evidence of deposition in the sea]
How many types of rock can you see in the small cliff here?	One: limestone [both the dark rock in the floor of the quarry and the yellow rocks are limestones]
Most rocks in England are layered and made originally of soft sediments. What name is given to this major group of rocks?	Sedimentary.
We have found out that these rocks formed under the sea. The fossils found here tell us that this was about 160 million years ago, in the Jurassic Period. The rocks are now above sea level, and broken by cracks called joints. How do you think all this happened?	Earth movements over millions of years uplifted the rocks and broke them.

Site B. Pupil Activity Sheet 4: Activity 5. Look at the top of the small cliff. You may notice that some of the beds of rock have been worn away over all those years, long before the quarrying took place.

Questions/Teaching Points	Answers/Interpretation/Comments
What is the name of the limey/sandy/clayey material lying on top of the rocks? Your teacher may collect a sample for testing back in school.	Soil [Made up of rock [mineral] fragments, decaying and living plant & animal matter, water & air. See **Working With Soil**]
As well as limestone, sand and clay, what is it made of?	Plant roots, decaying plant materials, minibeasts etc water & air
How do you think soil is formed?	Rocks are being broken down all the time by weathering processes. These include acid rain and freeze-thaw. [See **Working With Rocks** p 14].
Describe where some of the tree roots are growing	Down the cracks [joints] and along the bedding layers.
Look at the scree material at the bottom of the faces. What is it turning into?	It is turning into soil.
Try to identify some plants growing in the new soil on the scree slopes.	Silver birch and other tree saplings. Grass, plus others – identification depends on season! Moss & lichen in dark, damper areas, especially in southern part of the quarry.
Even on the hard surface of the limestone you should find places where tiny plants are growing. Try to describe and identify any you see.	Green mosses & green/black lichen
What clues have you found to show that animals live in the soil in this area?	Worm casts. Mole hills. Rabbit burrows and droppings.
Why do you think some faces have been cleared? Why do you think it is important?	To expose the rocks for people to look at! For education!!
Look at the southern part of the quarry. What is happening to the quarry?	It is becoming overgrown/colonised by trees and other plants.
Test the limestone with a water dropper. Is it porous or not?	Water soaks in, the limestone is porous.
There don't seem to be many streams or ponds in the area on top. Where do you think the water goes to when it rains?	Soaks into the ground, into porous rocks. Relate to WW Rocks activities – wells, water supplies etc.
What do we call the place where water comes out of the ground naturally?	A spring.

Site B. Pupil Activity Sheet 5: Activity 6. We have seen this limestone used for walls and buildings in the local area.

Questions/Teaching Points	Answers/Interpretation/Comments
What is it about the yellow limestone that makes it so useful for buildings and walls?	It splits into layers, is easy to break into regular shapes.
Is it used for road aggregate?	No, it is not hard enough for aggregates.
What else might the limestone be used for?	There are many lime-kilns in the area, where limestone was burned to make quick lime. This was used for plaster, mortar, whitewash and antiseptic. Ground-up limestone was spread on fields to neutralise acid soils. There are also several 18th Century iron furnaces by the streams, which used water power, local limestone as a flux, local wood as fuel and ironstone from South Wales. Pieces of furnace slag can be seen by the track, beyond the gate on the east side of Fordbury Bottom.

☛ Now turn to look at the level floor of the quarry. Take the group 50 metres to the South East towards site C. If this activity is not to be used, continue on to **Site C**
Having a close look at the quarry floor will reveal a very different limestone. It is hard, grey and older – of Lower Carboniferous age, about 340 million years old. Before looking at these rocks at the edge of the quarry we need to investigate the cleared area of the quarry floor. This was the shallow rock seabed for a short time during the Jurassic Period as the Inferior Oolite sediment was just being deposited on top. It will reveal oyster-like shells fixed in small hollows and borings likely made by bivalves, filled with Jurassic mud. These are two additional pieces of evidence to indicate that the Jurassic limestones were formed in the sea. **Figures 4 and 5** will help you to identify them.

Site B to C Pupil Activity Sheet 6: Activity 7. – A close look at the Quarry floor.
(This is an optional activity. Group leaders may want to go straight to Site C)
Now that we have looked at the Jurassic limestones in the quarry faces let us look at the quarry floor.

Questions/Teaching Points	Answers/Interpretation/Comments
Is the quarry floor made of the same creamy coloured Jurassic limestone as the faces?	No, it is a different rock.
Briefly describe this rock.	Hard, grey [It is also layered and is a limestone. It will be investigated at **Site C**].
Is it older or younger than the Jurassic limestone? [You may have done an activity in school which will help you to answer]	Older. [Sedimentation experiment – oldest at the bottom, youngest at the top]
How can you tell?	It is/was underneath/below the Jurassic limestone.
Describe the surface of the older rock on the quarry floor. Is it: Perfectly flat, Fairly flat, with small ridges, or Very bumpy?	Fairly flat, with small ridges [running [ENE/WSW].
What do you think this surface was in Jurassic times?	It was the sea bed.

Figure 4. Cemented oyster on quarry floor.

Figure 5. Surface bored by marine worms.

☛ We are standing on a Jurassic sea bed. We are going to walk SE towards **Site C**. On the way we shall keep a look-out on the ancient sea floor.

Between Sites B and C. Pupil Activity Sheet 7: Activity 8. A close look at the Quarry floor

Questions/Teaching Points	Answers/Interpretation/Comments
Do you know of any shelly creatures that live in the sea on hard rock? Your teacher will help you!	Some fix themselves to rocks – e.g. oysters. Some bore holes in rocks and live in them – e.g. piddock.
See if you can find any hollows about 6 cm by 3 cm, with oval shells in them, like oysters. Are they grouped together or separate?	Some are in groups, others are separate. [one area is marked on the map]
The best place to find borings is at the eastern edge of the quarry floor, at **Site C** Have a look for some. They are usually about half a cm wide. Measure the length of one.	There are several other localities, eg North of **Site A.** Lengths vary, up to 3 cm.
Are they grouped together or separate?	Usually grouped together at this locality.
The animals which made the holes died and the holes filled with creamy mud which is now hard. In which period of geological time did this happen?	The Jurassic Period.
Now let us look at the hard grey rocks that form the quarry floor.	

☛ At this point, if the class is large, it should be divided into two groups [about 15 in each]. One group should go to **Site D**, the southern end of the quarry to investigate plant colonisation. The other group should stay at **Site C**, taking care stepping over the edge onto the grass to view the older grey rocks from the side. When the work at each site is completed, the groups should swap over.

We can see at **Site C** that the Carboniferous Limestones have been uplifted and tilted, then eroded to form a flat sea floor and covered by Jurassic limestone.
The huge time gap between the ages of the two rocks [340 – 160 = 180 Ma] is represented only by the eroded surface that is now the quarry floor. Such a surface between rocks of different ages is called an UNCONFORMITY and represents millions of years of time. Here it is 180 Ma of missing time, with any rock deposited being removed by erosion.
Tedbury Camp Quarry is one of the best examples of an easily accessible well-exposed unconformity in Britain.
As the Carboniferous Limestone is hard it can be used for aggregates in road making, after being crushed to the right size.

In fact the Carboniferous limestone is more valuable and the Jurassic limestone was removed during World War II so that the Carboniferous limestone could be exposed ready for quarrying. But quarrying never began because there is no easy access to get the rock out of Tedbury. A new quarry was opened up near Whatley, with easy road links. Quarrying was concentrated at Whatley, especially when the rail link was established. Tedbury Camp Quarry is still owned by the Quarry Company and they have planning permission to extract the limestone, but this will not happen.

The Jurassic limestone removed was used for buildings and walls, with much used as cheap fill and the rest dumped on the eastern edge of the site creating the steep slope which provides foot access to the quarry.

Site C Pupil Activity Sheet 8: Activity 9 – On the edge.
Help the pupils to:
Circle site C on the map.
After our close look at what is on the Jurassic sea bed we can carefully step down over the edge of the quarry floor onto the grass and look at the hard grey rocks from the side.
We have already decided that they are older than the Jurassic limestones because they lie below and underneath them.

Questions/Teaching Points	Answers/Interpretation/Comments
Which TWO of these words best describe the hard grey rocks on the edge? **Layered; Jumbled up**; **Level**, [horizontal] **Tilted** [sloping]	Layered. Tilted [sloping].
Is it made of bits cemented [stuck] together? See if any rub off.	Too hard to rub off. May be possible to see bits [including fossils].
You might be able to find fossil shells of sea creatures. What does this tell us about where these rocks were formed?	It formed in the sea. Possibly corals, brachiopod shells, broken crinoid [sea lily] "stems" looking like polo mints. These are different from the Jurassic ones already seen at **Site B**.
Test the rock with acid.	It fizzes demonstrating it is a carbonate.
What does this tell you about the kind of rock it is?	Limestone, but not the same as the other one. It is older, harder and darker.
With a water dropper, test the rock for porosity.	Not porous, though some water may go down cracks in the limestone. It is thus permeable. [See **Working With Rocks** for definitions].
We can see that these layers or beds of rock are tilted. Geologists use the term "dip" to describe this. Are they all tilted [dipping] the same way? In which direction?	All dip the same way, to NNW Dip = angle of slope measured from the horizontal. Note the parallel ridges on the quarry floor, marking the line of the edges of the beds. Some are slightly harder than others.

☛We know from our work at **Site B** that Earth movements also happened after the Jurassic rocks were formed. Here at Tedbury we have rocks of two different ages, separated by a gap of millions of years of time. Here you can walk on the eroded surface boundary between the two and this is one of the reasons why this is an important conservation site.
Geologists give a name to this type of boundary between groups of rocks of different ages. It is called an **unconformity.**
We have found out that these older rocks also formed under the sea. The fossils found here are different and tell us that this was about 340 million years ago, in the early part of the Carboniferous Period. The rocks are now above sea level, are tilted and broken by cracks called joints.

Site C Pupil Activity Sheet 8: Activity 10 – On the edge.

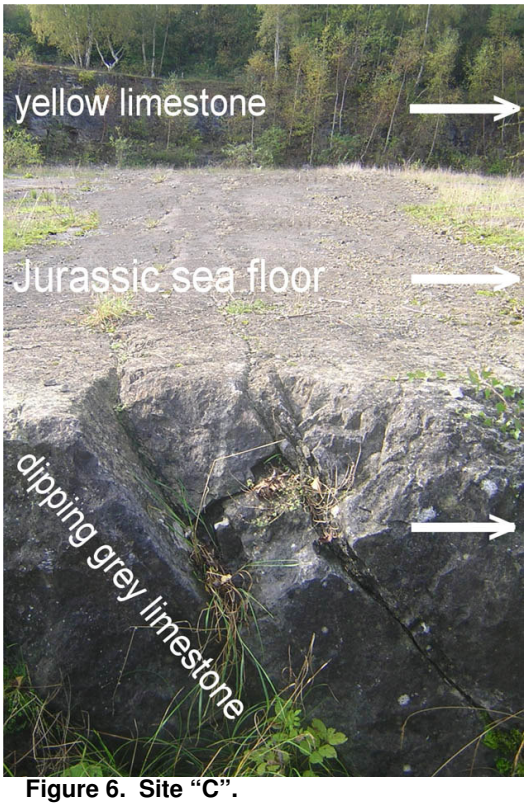
Questions/Teaching Points	Answers/Interpretation/Comments
How do you think all this happened?	Earth movements over millions of years uplifted the rocks, tilted and broke them.
Complete the labels in the boxes on **activity 11.**	

Site C. Pupil Activity Sheet 9: Activity 11.

Match the photo (**Figure 6**) to the view at Site C. On the photo mark on the following:

a. grey limestone
b. yellowish limestone
c. Jurassic sea bed

Draw arrows to link each part of the photograph to the box at the side with the correct description.



Horizontal beds of 160 million year old Jurassic limestone.

The 160 million year old eroded surface between the two rock types.

Beds of 340 million year old Carboniferous limestone tilted/dipping to NNW.

Figure 6. Site "C".

Questions/Teaching Points	Answers/Interpretation/Comments
Try to work out the time gap of the unconformity between the 340 Million year old Carboniferous limestone and the 160 Million year old Jurassic limestone.	340 – 160 = 180 Million years. [All numbers are approximate!]

☛ As the Carboniferous Limestone is hard it can be used for aggregates in road-making etc.
In fact the Carboniferous limestone is more valuable. The Jurassic limestone at Tedbury was removed so that the Carboniferous limestone could be exposed ready for quarrying [see earlier note].

Site C. Pupil Activity Sheet 11: Activity 12 – On the edge. We have already mentioned uses of the Jurassic limestone. If Whatley Quarry is part of your visit you will find out a lot about the uses of Carboniferous limestone.

Questions/Teaching Points	Answers/Interpretation/Comments
What is it about the Carboniferous limestone that makes it so useful for road aggregate and railway ballast?	It is hard and non-porous.
What else might the Carboniferous limestone be used for?	As a building stone. Burned to make cement. Cement added to sand & gravel to make concrete etc.
How is limestone moved from Whatley Quarry?	Mostly by railway to depots over southern England.
What are the benefits of using this type of transport?	Cheaper than road for very bulky loads. Road transport difficult and dangerous along country roads. More environmentally friendly, keeping traffic off roads & uses less fuel.

☛ We can now look at how plants are colonising the quarry, by heading South West to **Site D.**
At **Site B** [**Activity Sheet 2**, Q4] we mentioned the way that soil develops and plants colonise the exposures of rock. If your visit is part of an East Mendip Study Centre programme, the teaching staff will have activities relating to ecology and environment in the valley of the River Mells.
What follows at **Site D** is a possible alternative or an addition to these. The need to split a class into two groups of about 15 each to visit **Site C** without overcrowding gives us an opportunity to look at the ecology at the southern end of Tedbury Camp Quarry at **Site D**.
If groups have been split between **Sites C** and **D** then here is where the two swap sites.

Site D. Pupil Activity Sheet 11: Activity 13 – Plants taking over.
Circle Site D on your map on Activity Sheet 1.

Questions/Teaching Points	Answers/Interpretation/Comments
At **Site B** we mentioned the way that soil develops and plants colonise the exposures of rock. We can investigate this further at this southern end of the quarry.	
Before you get to the faces you will see patches of wet ground on top of the Carboniferous limestone. Why doesn't the water soak into the rock?	Carboniferous limestone is not porous.
What plants can you identify that live in these wet conditions?	Mosses, lichen, some grasses etc. These are called "pioneer" species because they can grow on bare rock. As they die and decay, they provide nutrients for the thin soil in which larger plants can grow in succession. This process is called "Primary Succession"
As you walk closer to the faces there is usually a gentle slope of broken rock material that is turning into soil. What name do we give to this slope of broken rock material?	Scree
What is this soil made of?	Bits of limestone, sand & clay. Living and decaying plants and animals. Water & air.
What rock are the faces made of?	Jurassic limestone [oolitic].
What plants can you identify growing on the rock faces and in the joints?	Mosses, lichen etc.
What other plants can you identify in this part of the quarry?	Silver birch, oak etc. as saplings of varying stages of maturity. Shrubs, grasses, various wild flowers etc., depending on season.
How have these plants got here?	Seed dispersal lesson!!! Silver birch pollen is a serious child allergen! – any in your school grounds? Wind, birds & other animals etc.
Investigate the leaf litter for minibeasts and larger animals. What can you find?	Wide range of minibeasts, earthworms etc. Possibly moles & rabbits elsewhere.
Decide which is the best way to measure the size of the largest silver birch, oak & another tree in the quarry.	Tape around the circumference, below first branch.
Compare the size with most trees above the edge of the quarry.	Those above the edge tend to be larger.
Suggest a reason for this.	Those above are older & were alive before the quarrying finished.
Why is this part of the quarry damper and shadier than the rest? A compass will give you a clue.	Southern end faces north, gets less direct sunlight than the rest of the quarry.

☛Look out for the original soil level before quarrying began. Teachers might want to collect a soil sample from here to investigate back at school. If groups have not already looked at the Carboniferous limestone – on the edge at **Site C** they should go there next.

Before we return to the parking area make sure that you have completed your activity sheets and not left anything behind.
Before returning to the parking area by the same route it would be useful to summarise what the children have learned by way of observation and interpretation. It should be possible to build up the geological story right up to the weathering and erosion of the present landscape, the work of Man and recent colonisation by plants and animals.
It might be useful to ask the children which type of limestone they think will be found on the way back down the path to Fordbury Bottom.
At the gated access to the rail link to Whatley Quarry note that exposed in the cutting is Carboniferous limestone [we are at a lower level than Tedbury Camp Quarry]. Notice the ballast. This would be a useful location to discuss uses of limestone and the reasons for using rail transport. On no account should anyone pass though the gate onto the track.

The Summary Activity Sheet 12, (the final one in TED8 Pupil Activity Sheets) could be completed by younger children or those who find the others too difficult.