[http://www.rgs.org/OurWork/Schools/Teaching+resources/Key+Stage+3+resources/Mapping+festivals/The+geography+of+Glastonbury.htm](http://www.rgs.org/OurWork/Schools/Teaching%2Bresources/Key%2BStage%2B3%2Bresources/Mapping%2Bfestivals/The%2Bgeography%2Bof%2BGlastonbury.htm)

**The impact of Rural festivals - The geography of Glastonbury**



**Place**

 ‘The Glastonbury festival is located in the UK, in the South West of England. It's in the County of Somerset, close to the cities of Bath and Bristol and the towns of Glastonbury and Shepton Mallet. Bristol Airport and the M5 motorway are nearby. The festival is held just outside the village of Pilton, near some rivers and close to the main roads of the A37 and A361. The festival is held in a rural area, on gently sloping farmland around Worthy Farm'.

**What is the meaning of the terms site and situation?**

The terms ‘site' and ‘situation' are most commonly used in geography with reference to the location of settlements - villages, towns, and cities. The meanings of the terms are as follows:

* Site: the features and characteristics of the place or point at which the settlement (or festival) is located
* Situation: the location of the settlement (or festival!) in relation to its surroundings - things like communications, other settlements, rivers, relief

Historically, the physical characteristics of a site and its situation would have been important factors in determining the most suitable place for a settlement. For example, the proximity of clean water would have been important for drinking, washing, cleaning and irrigation. Woodland would have been important for building materials, fire wood and food sources. Shelter and climate would have influenced the choice and flat land is easier to build on and to farm. Fertile land is also important for farming. If defence was considered important, a hill or rise in the land could act as a vantage point. More recently, human features such as communication links, proximity to other settlements (for markets, labour, amenities, etc.) have become more significant.

There are similar considerations to be made when deciding on the location for a music festival. Their locations will be influenced by the physical landscape and human features of their site and situation. Accessibility is important and sites may be chosen which are reasonably close to main transport routes and also in a place where they are accessible from main urban centres from which large populations can be tempted. However, more rural locations which are further from more densely populated areas may be more suitable for noisy crowds. Campers prefer flat ground and stages need it - a flat site or very gently sloping relief is best. Festivals are often big events (134,000 weekend tickets were sold in 2008 for Glastonbury) so large areas used for extensive agricultural grazing are often used. A more rural situation also often makes for a more scenic and attractive setting.

**Processes/ perspectives**

**What are the potential impacts of festivals, with examples from Glastonbury?**

In 2008, 177,500 people went to Glastonbury - festivals of this volume are like small towns. Although temporary, this mass migration of people descending on a relatively small, rural site has huge impacts

**Traffic**

Two thirds of people attending the festival come by car. The roads around the site are narrow and largely unlit, and there are only two car entrances. A graph on the [Glastonbury website](http://www.glastonburyfestivals.co.uk/information/) shows that at peak times, it can take over seven hours to exit the festival after the weekend. As well as congestion, pedestrians have been knocked down and the contribution of all these queuing cars to air pollution is an issue. It is also not just the traffic over the weekend, it is also getting the site ready, maintaining it during the festival and clearing up afterwards. Jobs done by tractors, tankers and trucks.

**Waste**

Two thousand tonnes of waste are produced over the weekend. This is not just the rubbish going into the bins around the site, but also tent pegs and other camping equipment left behind, waste from traders and food stalls, and also...

**Sewage**

Three thousand two hundred and twenty toilets must be delivered to the site before the festival begins. During the festival, they are emptied into large tankers which make 40 trips a day to take the sewage 30 miles to Avonmouth on the Bristol Channel.

**Water**

One third of the 1.5million gallons of water needed each day on the site needs to be transported from a reservoir seven miles away, despite the fact that over 10 miles of pipes have been laid under the site over the years. All this pipe-laying has its own environmental impacts too, and the same is true of the 100km of cabling which has been laid for...

**Electricity supply**

Two hundred generators supply 30MW of electricity over the festival weekend - as much as the whole of the city of Bath would be using in the same period! Light pollution from festivals is another issue.

**Crime**

Festivals are busy, crowded and noisy places, and with such huge numbers of people congregating in one place, crime is an issue. This requires 25,000 hours of police time - the largest single operation in the south-west's calendar. Crime has fallen since 2000 though, when there were 2,276 reported offences (gatecrashers were a huge problem), to 304 reported offences in 2005. Other emergency services also have a vital role to play, for example the fire service which pumped flood water out in the wash-out of 2005.

The BBC News article [‘Building a city in a festival field'](http://news.bbc.co.uk/1/hi/entertainment/6727261.stm) describes Glastonbury as being a ‘tent city with the population of Norwich or Sunderland'.

**How can flooding affect major events such as music festivals?**

Just type Glastonbury floods into Google images and see what comes up. Glastonbury has been affected by flooding over the years, although drainage was improved after floods in 1997 and 1998. However, flooding continues, for example in 2005 and 2007 - although the water did dissipate within hours thanks to the drainage improvements. In 2005, the heavy rains and thunder on the first day delayed the opening of the festival and several stages were struck by lightning. The deluges left some areas of the site under four feet of water, and flash flooding literally caused rivers to run through the site and wash away tents and peoples' belongings. The Reading Festival is another festival that is sometimes badly affected by heavy rains

**How do you use the flood maps on the Environment Agency website to assess the flood risk to selected festivals?**

The Environment Agency is the leading public body for Environmental protection (air, water and land) in England and Wales. One of their main roles is in flood warning, protection and management. The website provides lots of information for people on how to assess their personal flood risk, and what to do in the event of, and aftermath of a flood.

The flood map tool on the website allows people to enter a postcode and obtain a flood risk map, which gives the likelihood of flooding in that area. It also provides further information on understanding what the flood map shows.

The What is in your backyard? section of the Environment Agency website identifies local environmental issues. Click on the flood risk icon. On the next page, you must enter the postcode for Glastonbury Festival - BA4 4BY - into the search box, and click search. When the map appears, zoom right in to 1:20,000. This reveals a map which shows that the site is at risk of flooding from rivers or the sea without defences - shown by the blue shading on the map. There is a strong likelihood that at least some of the site would be affected if heavy or persistent rain led to the rivers bursting their banks. However, the flooding is unlikely to be very severe or extensive, mostly affecting the lower land of the south and south-east corner of the site.

V Festival (Chelmsford) is held at Hylands Park (CM2 8WQ). The flood map shows that the park itself is unlikely to be affected by flooding - the area at risk of flooding is to the east of the site. However, more able or perceptive students may pick up on the fact that the railway and main access roads may be affected by flooding, which would have potential knock-on effects on the festival.

Leeds Festival at Bramham Park (LS23 6ND) is at a small risk of flooding on the northern edge. However, this does not look likely to be extensive. There is, however, some risk of travel disruption due to flooding of the nearby access roads.

Reading Festival at Little John's Farm (RG1 8EQ) close to the centre of Reading itself lies on the south bank of the River Thames. The flood map shows extremely high risk of flooding which would affect most of the site (all of the site during an extreme event), and also the surrounding area, causing extreme local disruption. Again, if you type Reading Festival flooding into Google, you come up with a multitude of articles, images and sites.

Beautiful Days Festival takes place at Escot Park in Devon (EX11 1LU). The River Tale runs through the park, and the flood map reveals that this is susceptible to flooding which will affect an area running from north to south through the site, and may also affect access roads and the main A30. However, the remainder of the site looks to be safe.

Latitude Festival takes place at Henham Park, Suffolk (NR34 8AN). The flood map shows that the majority of the park itself is free from flood risk, although the far south would flood. The main flooding is to the east, along the river. This may affect travel along the A12 in a few places close to the festival site.

Possibilities

**What is the meaning of the term sustainable?**

World Commission on Environment and Development (WCED) definition of sustainable development describes it as ‘development that meets the needs of the present, without compromising the ability of future generations to meet their own needs'. This is the most commonly used definition of the term. Further explanations and definitions are available on the [Global Development Research Center website](http://www.gdrc.org/sustdev/definitions.html).

In terms of music festivals such as Glastonbury, there is potential for significant environmental impact ranging from waste and pollution to energy use and carbon footprint. If a festival is to be described as sustainable, it must ensure that it addresses this impacts so that they are eliminated or significantly reduced.

Norway's Hovefestivalen uses biofuels and recycles everything on its site, as well as investing profits into carbon capture and storage research. It is the only festival in the world which claims to be 100% carbon-neutral. In the UK, the Big Green Gathering in Somerset uses a pedal-powered stage and is the front-runner in the UK festival ‘green' stakes. Glastonbury has a way to go, but is making significant progress.

**What is Glastonbury Festival doing to be more ‘sustainable'?**

The [Glastonbury Festival website](http://www.glastonburyfestivals.co.uk/) contains a lot of information about its attempts to be more sustainable. Taking the headings from the students' Greenest and cleanest' main activity, Glastonbury is:

Reducing waste and recycling - 15,000 bins around the site are labelled for different types of recyclable waste - 50% of all waste produced is recycled. Reusable cotton, rather than plastic bags contain the programmes given out to all people on arrival, and compostable tent pegs are provided to reduce the number of metal ones left in the ground after the festival.

Reducing waste also involves encouraging green trading. Food traders are required to use wooden cutlery, rather than plastic, and to use compostable plates and cups. A yearly Green Trader Award recognises the four most eco-friendly stalls. Criteria include how the vendors get to the festival site, what their stall is made of, what they sell, their packaging materials,and how much they recycle.

The website aims to try to reduce traffic, and promote greener travel. The [getting here](http://www.glastonburyfestivals.co.uk/information/advice) section contains information about National Express and also Brighton Peace and Environment Centre coaches which are run especially for the weekend, direct to the site. Special train services are also put on to Castle Cary, where a free bus-shuttle service picks people up and takes them to the site. There is also information about lift sharing. The Liftshare section of the website estimates that 15,000 fewer car journeys take place each year to the festival as a result of car sharing, and directs people to sites like liftshare.com and freewheelers to organise their travel. There is also further information for those still wishing to travel by car on cars and climate change, including websites to find out how your car compares to others.

Greener fuel - Biodiesel is being used more and more. All tractors used in the run-up to the festival are run on 100% biodiesel fuel, and biodiesel generators are increasingly used. Traders are encouraged to use energy-saving light bulbs where possible. The ‘Green Fields' area of the site, described as the ‘soul of the festival' now occupies 1/3 of the site and is run on wind and solar power. Here, traditional skills and new ways of sustainable thinking are demonstrated and explored.

Wildlife sanctuaries are set up around the site to conserve wildlife during the festival. All this good, green behaviour is encouraged by the ‘love the farm, leave no trace' motto, explained by Michael Eavis the website. Over 100 comically costumed ‘Green Police' also patrol the festival during the weekend, encouraging people to respect the farm and its environment - for example using ‘butt bins' which are provided for smokers, and using the toilets!

Worthy causes are supported by the festival - Ethical thinking is promoted and Fairtrade is encouraged - in fact, only Fairtrade coffee and hot chocolate are sold at the festival. People are encouraged to use ethically produced camping equipment during the festival.

The festival works to support Oxfam, WaterAid and Greenpeace. The Oxfam shop at Glastonbury and the work of the 1,700 Oxfam stewards over the festival weekends have raised millions to help fight poverty over the last 15 years. A WaterAid auction sold off wellies especially designed for the festival by Hunter - and signed by celebrities - to raise money for water projects around the world. Local charities and good causes also benefit - since 2000, over £1 million/year has been paid towards local causes, and in 2007 the figure was almost £2 million. Much of this money has been invested into restoration or rebuilding and development projects in the Pilton community.

Despite all this, more could be done: more could be recycled, more renewable energy sources could be used to generate power, light pollution could be addressed and more people could be encouraged to use public transport.