

# CROSS-CURRICULAR A HOLE LOT OF FUSS



## STUDENT INFORMATION SHEET



### SECTION 3 - RESTORATION

#### WHAT IS RESTORATION?

Quarrying and the extraction of aggregates is a temporary process. Once the mineral resource has run out, the quarrying company will leave the site. However, there are strict regulations surrounding this process and once extraction has been completed, the industry is obliged to leave the site in at least as good a condition as before quarrying began.

Therefore, a detailed plan for the RESTORATION of the land is prepared, even before planning permission is granted. These plans make up an essential part of the planning proposal. A lot of time, preparation and discussion with the local community and other interested organisations is put into deciding what the best possible use is for the quarried land. This can be either the restoration of the land to its former use or to an alternative use.

Often quarrying is a gradual process and is carried out in PHASES. This means when one phase has been completed, so the restoration of that land can begin while the quarrying of another phase is started.

#### RESTORATION ALTERNATIVES

##### AGRICULTURE

Most sand and gravel pits are restored to agricultural land. The resulting land may even be more productive than before the quarrying took place because factors such as drainage and the soil fertility may have been improved.



**Restoration to agriculture**

#### **LAND FILL**

Some quarries are used for the disposal of waste. This land use may be more acceptable in a quarry or pit than elsewhere. Sometimes, once the land fill has been completed, the land is then returned to agriculture.

Sand and gravel pits are not as suitable for this use as rock quarries because there is the risk that, unless they are lined with clay, pollution may escape from the site. Strict regulations ensure that such sites are carefully controlled and monitored.

#### **BUILDING**

Disused quarries have also been used for building sites, with housing, industrial estates, science park, caravan sites and retail parks being constructed on them. Developments like this take the pressure away from more valuable rural areas which may be at risk from building developments.



**Restoring to woodland**



**Wetland Restoration**

### **NATURE RESERVES**

Many quarries have been restored to nature reserves. Depending on the local climate, rock type, vegetation and geographical position, quarries can provide a diversity of habitats for wildlife.

In recent years wetlands such as rivers, salt marshes and lakes have been rapidly disappearing. Quarrying provides a rare opportunity for industry to create a completely new wetland habitat for wildlife. Areas can also be restored to woodland habitats and other natural environments.

Quarrying companies often work together with local wildlife organisations during the planning and creation of these sites. These carefully managed nature reserves can then become valuable wildlife habitats.



**Country Park**

### **LEISURE**

Many quarries have been restored to leisure areas. Flooded quarries can be turned into water sports centres or fishing lakes. Dry quarries can be developed for rock climbing centres, golf courses and country parks.

This is often the favoured option among the local community, providing the area with a much valued amenity.

### **WATER SUPPLY**

Larger quarries can be flooded and turned into reservoirs. Some quarries naturally fill with water once quarrying has finished. These reservoirs can also be developed for recreational use as well.



Water sport

#### **ADVANTAGES**

In general, the restoration of quarried land provides great environmental benefits to local communities. The restoration is mainly successful due to the careful planning and preparation that goes into the initial proposal.

In a lot of cases the restoration of land will mean areas which were not considered visually attractive before extraction, are actually transformed into more attractive areas after extraction. This, together with the local employment possibilities, also provides economic benefits for the local community and surrounding area.

Restoration also brings together the quarrying industry and local organisation and gives the local community a chance to decide to what use their local environment is put.

In general, restoration has many advantages, including the fact that the land that has been quarried is ultimately returned to its former, or even better, use. In 1988, 95% of all land reclaimed in England after quarrying, was restored to a satisfactory standard.

Examples of the way in which quarries and pits have been restored are available from the PR Department at Tarmac Quarry Products, Millfields Road, Ettingshall, Wolverhampton, West Midlands WV4 6JP. Tel: 01902 353522, Fax: 01902 495 562.  
E-mail [info@tarmac.co.uk](mailto:info@tarmac.co.uk), website: [www.tarmac.co.uk](http://www.tarmac.co.uk)

Also refer to the Restoration section on the Quarry Products Association website - [www.qpa.org/env\\_res.htm](http://www.qpa.org/env_res.htm) found under the "Environment "button.