## How Human Activities and Processes on the North Yorkshire Moors have affected the Environment

In the 1940's and 50's gripping was introduced to the North Yorkshire Moors. Gripping was when Farmers got grants from the goverment to dig miles of trenches (ditches) 50cm deep, to drain wet areas of heath and blanket bog. There were advantages and disadvantages to this though. Gripping would improve the Moors as there would be less water going into the rivers, instead rainfall would go into the grips, therefore the water could be drunk by any lifestock in the fields. Before, when there where no grips it was safer for sheep to graze and play safely but now over the years that the grips have been there, it has caused hazardous for sheep as they could either fall into the watery depths of the grips, or worse farmers lose lambs and sheep, which fall deep into deep, eroded grips and cannot escape. Another Damage that the grips have caused is, Erosion, has caused the ditches to widen over the years it has been eating away at the walls of the grips, the soil has started to break up and fall off. 'The grips had seemed to be a good thing at the time' said one farmer. There was no chance of reversal it would be too expensive. Although the goverment put money towards the grips it would now cost at last twice as much because of the grided material.



In the past many areas of wet moorland were drained with open grips to improve the grazing capacity. Government Grants were given for efficient drainage and, while this acheived the prime purpose, it also led to a significant reduction in active blanket bog, which is so important for nature conservation and for providing the insects on which many birds feed. Grouse Chicks, for example, in the critical first few weeks of their life, must have insects. Another disadvantage has been a more rapid drainage of surface water, which can cause erosion of grips and flooding of rivers.

'Grips are leaking wounds that will never heal' said another farmer

Hill farmers make a living from all this and think its neccessary for there way of life. But thats not what the villagers think as Lambs have had to be taken away to safe areas in winter as they dont

know when the flooding will start. There has been conflict between the villagers and the hill farmers as the hill farmers think they are making the environment a safer place when infact they are destroying it. And making it unsafe for there flock.

Blocking the grips up would reduce erosion, restore natural drainage patterns, Encourage revegetation of the bog surface. The main priorities would be to block the eroded grips first as they are the main problems,.

Methods of Block gripping

Dams would stop flooding in other towns so there would be no more hassle. Plant material such as heather would slow down the water flow and would help with the growing of natural vegetation.

## Before the grips

Before the grips were introduced when it rained the rain layed on the surface of the moor until more downpour, the rain then got absorbed into the peat (like sponge) which released the water slowly into the Permeable rock which lets the water through to the impermeable rock which then forces the water out into the rivers. With this process there are not many floods to the bottom moors.

## **Using Grips**

Using grips mean that they act like little rivers which means there is less water going into the rivers but it can also cause flooding downstream because it brings out the river much quicker causing sudden bursts of water which have flooded the towns downstream. The effects of drainage using grips include: Loss of young birds, including Grouse and waders, which fall into and cannot get out of steep sided grips. wet soil conditions and damage to plant species. An increased incidence of flooding and flash flooding caused by greatly increased speed of run off, which also causes damage to Wall and Fences which have been wiped away with the force of the floods. There is a reduced number in invertebrates, which are used as a food source for a variaty of birds. If the insects die then the Fish die and if the fish die then the birds die because they have nothing to eat.