INTRODUCTION

The small village of Malham is situated within the Yorkshire Dales National Park, about 60km North-West of Leeds. There are twelve National Parks in England and Wales. These areas have been chosen because they are beautiful natural areas of countryside.

A National Park Authority has two main duties:

- to conserve beautiful scenery, wildlife and historic features;
- to help people to understand and enjoy the special qualities of the area

Malham is a typical 'honeypot', which means that it attracts a large amount of visitors in only a small area.

The Yorkshire Dales National Park Authority want people to visit and enjoy the breathtaking scenery surrounding Malham but they also need to manage the area so the natural beauty remains intact.

The YDNP Authority need to make sustainable development to the area so the ever increasing number of tourists to Malham can visit without making a bad impact on the area. Research will be carried out to see why tourists visit Malham and to see what affect they have on the area. The management of the area can then be analysed as to how effective it is and whether it is sustainable or not.

AIMS

There are three research questions that will be answered

RQ1 - What evidence is there that the quality of this landscape is high and that tourists are attracted to this area?

RQ2 - What evidence is there of the impact of tourist's on the area?

RQ3 - How is the impact of tourism being managed and is it sustainable

What makes Malham so attractive and such a popular 'honeypot' site will need to be investigated into. What makes the landscape of the Malham area so attractive will need to be researched into and other factors that attract tourists to Malham will be looked at.

Research will be done to find evidence of tourist impact on the area. The positive and negative impacts of tourists to the Malham area will be discussed.

How these different impacts are being managed will then be looked at and then levels of tourist impacts and the degree of management in different areas around Malham will be compared to see if Malham is being well managed. Different methods of management will be looked at to see how they affect or control the impact of tourism to the area and to see if they are sustainable or not.

METHODS OF DATA COLLECTION

Research question 1

Primary data:

Landscape quality idices were used because they compare the quality of the landscape in different areas in Malham and also at Ripon Grammar School. They also compare natural and manmade areas. Limitations to them are that weather and season can alter results. For instance areas with beautiful trees and forests may not look so good in winter because the trees will be bare. On the day the scores were collected it was misty which may have affected peoples judgements on different areas. The scores are also based on peoples personal opinions which is why averages were taken to try and get an overall fairer picture of the quality of landscape for each area.

Photographs were taken because they show the landscape features that are being described and enable them to be seen.

Visitor questionnaires were used because they show you what tourists think of the area, why they are attracted to it and why they are visiting Malham. There are limitations as to how many people can be questioned. On the day that people were asked to fill out our questionnaires they wasn't many people there due to the bad weather so previous questionnaires had to be used from Ripon Grammar School students who have previously visited Malham.

Secondary data:

Previous questionnaires, as stated above.

The internet, giving extra pictures of the landscape from different views and in different weather conditions.

Research question 2

Primary data:

Recreational data collection sheets were used because they summarise how tourism and tourists have effected each area and to what degree which makes for good comparisons. Averages were taken from everybody's scores to get fairer and less personalised results.

Photographs were taken of different impacts so you can see what they are and to what extent they occur.

A land-use map of the village was used because it shows how tourism and tourists affect the village itself. It shows the amount of shops, B&B's etc directed towards tourism and the amount of buildings directed towards the village and it's inhabitants. The limitations are that it doesn't show how much each building is used so it doesn't show the direct tourist impacts.

Visitor questionnaires were used because they show how tourists use the village and what they like and dislike about the village. There were limitations that there wasn't many people to give a questionnaire to when we visited Malham so previous questionnaires were used.

Secondary data:

Previous visitor questionnaires, as stated above.

Information sheets from YDNP Authority were used because they give extra information about the area although they may not give bad opinions about the area because they are written by the authority.

Research question 3

Primary data:

Recreational data collection sheets were used because they show how different areas are being managed and give indications as to how sustainable the management is. Averages were taken from everybody's scores so you get a good overall picture of the scores and it makes it fairer and less personalised.

Photographs were taken because they show some of the different ways that areas are being managed. They help to give you a better idea of what various management techniques are like as you can see them and they can remind you. Limitations of photographs are that although they help to show what different management techniques are like they don't necessarily show how effective the techniques are and whether they are sustainable or not.

Secondary data:

Information from the YDNP Authority gives you a more detailed summary of the ways in which the areas are managed and tell you the aims of various management schemes which could indicate how sustainable they are. Limitations are that they may not underline issues which are or were not successful.

DATA ANALYSIS/INTERPRETATION

How has the distinctive landscape of this area been formed?

About 15 000 years ago the area was covered with ice sheets and glaciers. The ice swept down from the north scouring and modifying the karst landscape. This formed gorges like Goredale scar and various crags and scree slopes. Probably the most distinctive features of the glaciation is the formation of limestone pavements. Originally freeze thaw weathering occurred. This is where water gets into cracks in rocks and as it freezes it expands and widens the gaps that the water got into. Once the ice had scoured away all the soil thus exposing the limestone pavement to the elements, rainwater seeped into the fractures. Due to the chemical properties of limestone (calcium carbonate), rainwater readily dissolves the rock. The fractures were opened up by the dissolving of rock walls to produce the ubiquitous grykes and clints.

The diagram below shows where the most distinctive features lie:

What evidence is there that Malham is an area of high landscape quality?

Firstly, Malham is in a national park which represents the high quality of landscape as there are only twelve national parks across England and Wales. This shows that the landscape must be of a high quality otherwise it would not be looked after and managed by the YDNP authority.

Some of the distinctive features of high landscape quality are as follows;

Malham Cove is a natural rock amphitheatre 70m high, which over a period of time, has been eroded back from the Middle Craven Fault by a combination of ice and water.



At the top of Malham cove is a large limestone pavement:

Goredale scar lies 2km east of Malham and has a similar origin to that of Malham cove i.e. a product of fault scarp retreat, again from the Middle Craven Fault.



The beck that runs down through Gordale seems to be somewhat dwarfed compared to the gorge (a "misfit" stream).

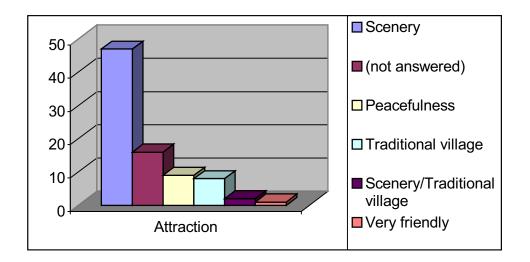
Janet's Foss is also an area of high landscape quality:



The scores for Malham village are noticeably lower than the other sample areas around Malham. Malham village has buildings and houses built around it which shows that the scores for the other areas around Malham are high just because of the landscape quality. Manmade buildings decrease the landscape quality for Malham village.

On one of the YDNP information sheets for Malham it states that 'few places in Britain possess such spectacular examples of upland limestone landforms on a scale as dramatic as the area around Malham'. This supports evidence that the landscape is of a very high quality. It also reveals that natural limestone features are very rare and for Malham to have such spectacular limestone features it must be a special place.

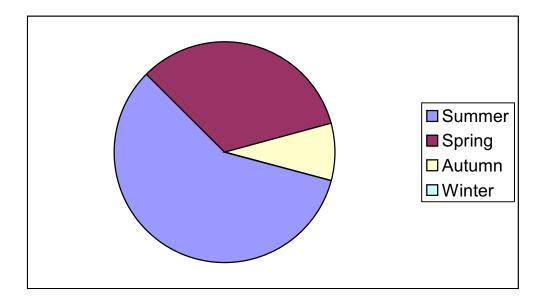
Visitors were asked 'what do you find attractive about the village?' The results are as follows:



The data is conclusive that people find the scenery attractive. Very few of the answers were to do with the village itself but the scenery which shows that the scenery stands out above anything else which supports evidence that the landscape is of high quality.

Another question was asked, 'If you are likely to return, when is your visit most likely to be?'

The pie chart shows how people responded:



The results show that people would want to return when the weather is nice or good for walking as nobody wanted to return in winter. I believe the results represent peoples favourite times of year or the time of year which they think scenery is most beautiful as most people visit to see the scenery. This supports the landscape being of high quality.

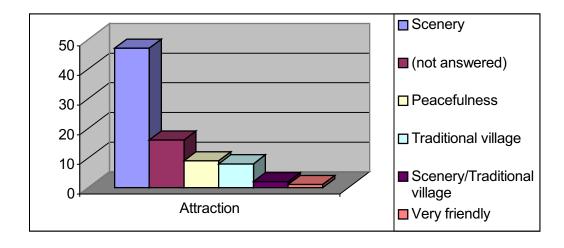
What evidence is there that tourists are attracted to the area?

Firstly there is data on the number of visitors to Malham National Park Centre given by the YDNP authority. The figures are from April to March inclusive and you have to keep in mind that many visitors do not go into the National Park Centre so it does not represent the total number of visitors that visit the Malham area.

1991/2	139 466	These figures show that a very large
1992/3	148 424	number of people consistently visit
1993/4	149 940	Malham. The number of people that
1994/5	142 440	actually visit the Malham area will
1995/6	142 570	be a lot higher than these figures as
1996/7	147 734	they only represent people who visit
		the Malham National Park Centre.

The YDNP authority estimate that around three quarters of a million visitor days are spent in Malham per year. That is a very large amount of people visiting so obviously the vast majority of them are tourists visiting the area. This must surely indicate that tourists are highly attracted to the Malham area.

Again this bar chart can be used to show that tourists are attracted to the area:



All of the people who answered the question gave a response indicating that they find the area attractive. This supports the existing evidence that tourists are attracted to the area. In a previous questionnaire people were asked where they live or in other words where they have travelled from. The map of Britain on the next page shows each response marked as a red dot in their county.

The map shows that the majority of visitors come from within 60 miles from Malham although there are a large number of tourists that are prepared to travel very long distances to get to Malham. There were even tourists from overseas, Ireland and Vancouver. The questionnaire was taken in summer, when Malham is at it's height of popularity but it was only taken on one day and you are still seeing many people travelling well over 100 miles to get to Malham. Also there will have been many more people who visited Malham on that day who did not answer a questionnaire so it is most likely that there will be even more tourists travelling long distances. If such a large number of tourists are prepared to travel such long distances it seems pretty conclusive that tourists are highly attracted to Malham and it's scenery.

So Malham has very high quality natural landscapes which tourists are greatly attracted to and visit in large numbers. This makes Malham a 'honeypot' site. This means that a large number of people are attracted to and visit a small area.

Surely this poses great problems for Malham and it's surrounding area?

What evidence is there of the impact of tourists on the area?

Firstly I will discuss about land uses in the village relating to the land use map on the next page.

There are lots of different types of buildings which are unusual in a village of this size. Many of them are directed to accommodate and or serve purpose for tourists to the village. Obviously a lot of the village is revolved around tourists as there are so many that visit which is why there are buildings that would be classed as unusual in any normal village of it's size.

Services for the visitor:

Accommodation: no. of bed spaces	256
(includes: hotels; guest houses; youth hostel; bunk barns; etc)	
Cafes / Restaurants	6
(including those in hotels)	
Shops	5
(Post office and general store limited winter opening; souvenir; sweet; etc	:)
Public houses	2
Camp sites	2

As shown above there is a massive amount of accommodation made available to tourists. Infact the amount of beds available for tourists is much larger than the entire population of the village. This gives a good indication about how dedicated the village is to tourism.

Population figures:	Year	1801	1851	1881	1891	1931	1951	1971	1981	1991
(official census data)	Population	262	188	148	163	126	171	163	112	134

A decrease in population as the national population rises shows that over the years Malham has become and is still become more directed towards tourism. Almost 25% of all buildings in Malham have tourist functions. This gives good evidence that tourism greatly impacts Malham village.

The majority of tourist buildings start at the car park at the bottom of the village and follow the river and road towards Malham cove. There are shops and eating facilities as you go through the village from the car park. There is only one building with a tourist function along the road leading to Gordale scar. This indicates that it is more popular for tourists to go to Malham cove especially as there are other areas and walks that lead on from there.

There are other tourist impacts to Malham village and surrounding areas that are not shown by the land use map.

There is a fairly large problem with litter in Malham village and the surrounding areas. Because there are so many tourists it is hard to keep litter under control. And it isn't practical to have a large number of bins ever ywhere and they could detract from natural beauty just as much as the litter itself. There is also a risk that litter could harm livestock and wildlife and it is costly and time consuming to remove.

There are problems with the footpath erosion. Heavily us ed footpaths experience quite a lot of surface erosion and paths are starting to widen as users try to seek easier routes. Excessive erosion has been known to be a major problem in certain areas.
Hay meadows and their rich diversity of species have been lost. Wildlife has been increasingly disturbed.
Limestone pavements have been degraded in places by the removal of stone and general wear and tear from livestock and visitor's feet.
Problems for farmers and land owners include: increases in trespass; damage from walls being climbed; disturbance of stock and vandalism.

The picture shows a collapsed wall

There are also problems for the residents. General encroachment on the lifestyle of local people is becoming commonplace, through increasing noise, disturbance and loss of privacy.

The popularity of the village has also started to cause various problems. The popularity has caused competition for housing which has led to an increase in house and property prices. Increased house prices have made it more difficult for low income earners to buy property in the area and has added to the outward migration of young people. Growing numbers of holiday homes have reduced the availability of property for rent, adding to the difficulties of local people on low incomes, the young in particular.

All of these problems have derived from or are a direct consequence of the large number of tourists visiting Malham. They are all tourist impacts to the area. The number of visitor's to Malham is ever increasing. This means that more people need more facilities. The pressure for tourism related developments, such as cafes, pubs and shops, is growing. This is what has happened in the past causing a decrease in population and residential housing and an increase in tourism in the area.

Activities of tourists:

In a previous questionnaire people were asked what activities they would undertake during their visit. Their responses were as follows:

Walking / Sightseeing in the village	63
Visit Malham cove	54
Visit Goredale scar	47
Visit Malham tarn	44
Eat in a café or pub	42
Visit tourist information centre	37
Visit Janet's Foss	26
Visit shops	24
Picnic	19
Other	8

This data shows that most people will walk through the village towards Malham cove. This means that the majority of tourist related buildings will be accessable to the tourists as they walk through the village. Obviously that is why the tourist related buildings are where they are so they can gain maximum income as it is more likely that they will get more business as more tourists pass by. Tourists also may be more likely to buy things on route to Malham cove because there are long walks in that direction and there are more places which would be suitable to have picnics which people may buy things for or eat to prepare themselves for.

There are also other activities that people come to Malham for as shown in the photograph below.

Another question was asked on the same questionnaire, 'What facilities do you think you will use in the village?'

These were the answers:

Public toilets	64
Car park	62
Tourist information centre	49
Cafes	46
Public houses / hotels	38
Gift / craft shops	36
Post office	22
Clothes shop	6
Local farms	5
Other	3

This shows that certain facilities have been made in the village specially for tourists, public toilets, a car park and a tourist information centre. This helps to show the tourist impact because a village of such a small size has these facilities built for tourist purposes. This acts as further evidence that there is a large tourist impact on the area.

Cafes, public houses, hotels and shops are also highly used by tourists. This suggests that a lot of money can be made from tourists.

Because so many tourists come to Malham there are lots of job opportunities within the village. Although there is a lot of money to be made from tourism in Malham there are drawbacks to tourist realated jobs. For instance in a questionnaire response showed earlier it indicated that the majority of visitor's come in summer and there will be very few during winter. This can cause problems because it can mean that people do not have a constant all year round job. Employment in the tourist industry however, tends to be part-time and relatively low paid with few career prospects. The seasonality in the tourist industry can ofcourse be a good thing for some people as they can get other jobs in the area that complement a job in tourism. Another plus of tourist related jobs is that there are always lots of tourists coming to Malham and the number is rising so there will always be chance to make a decent income. Tourism is the only line of work that brings large amounts of money to the area and many people rely on it. Some local services benefit from incre ased trade however many shops have changed to selling gifts for example, rather than catering for the needs of the local population. This shows off the impact of tourism because shops direct their sales towards tourism over their local community.

The YDNPA estimated that tourists spent about £46 million in and around the park during 1991. In 1994 this estimate had risen to £89 million.

1991 figures suggest that the tourist industry supported the equivalent of 1000 full-time jobs in the park and perhaps another 250 outside. The money also has a knock on effect, generating income from materials and services which are bought by local tourist businesses.

These figures show just how much money is pouring into the area as a direct consequence of tourism. One of the major impacts of tourism to the area is the money it brings with it.

The figures also show how many jobs are made in the park because of tourism. Tourism also creates jobs outside the area which is a good plus point. Income is generated from materials and services which are bought by tourist businesses. This is because of tourism and is an example of the knock on effect money spent by tourists has. So tourism in the Malham area also benefits other people.

How the village is structured at present it is almost completely dependant on tourism, there are few other local jobs although there are some like blacksmith's.

I believe the impact of tourism would be just as great if no tourists visited Malham because of how dependant the village is on tourism. Especially with the facilities in the village whose purpose is for tourist use you can see the impacts that tourism has on the village and how much money is brought in to the area itself and also outside of it.

Ecological impact scores where taken to help show the negative impacts of tourists to the area. Different areas were assessed and average scores were made to show how greatly tourists impact each area. Results which have been averaged are shown for different areas in a located bar map below. The results are proportional to each other.

The results show that Malham village, Janet's Foss and Goredale scar suffer the largest tourist impact. Most visitors walk through Malham village so there is bound to be a fairly large tourist impact to it. The most popular route for tourists is to go to or towards Malham cove but it has the lowest impact scores, especially at the top. I believe this is because many tourists still go to Janet's Foss and Goredale scar. They are also smaller areas than around Malham cove so less people will be needed to make a large impact to the area.

The final major impact of tourism is traffic in the village and its related issues.

At present there is provision for 88 cars and 11 coaches on the national park site. This increases to 168 cars if attendants are used to direct the parking onto the grassed areas. Surveys in recent years show an average level of parking of 86 in the car park and 42 in the village on weekdays over the April-August summer period. This rises to an average of 119 in the car park and 74 in the village on Sundays.

The amount of traffic and people at peak times, when cars have to overflow and park on grass, make Malham village very congested and spoil its image. Instead of looking natural and untouched it looks like a holiday destination. When there are so many cars parked on grass and roadside in the village it can cause huge amounts of congestion and can become hazardous. Walls have been known to have been knocked down by cars trying to pass on narrow country lanes. The number of cars also causes a lot of erosion on the narrow lanes.

In a previous questionnaire people were asked how they travel to Malham and the results are shown below:

Car	61	This shows that most people travel to Malham by car.
Coach / bus	15	This is the traffic problem Malham has because there are
Walk	3	limited parking spaces and so many cars which cause all
Other	2	kinds of problems.
Motorbike	1	
Bicycle	1	

Carrying capacity of the countryside

Malham has a limited ability to cope with visitors. If more people arrive in the village then damage will almost certainly be done to the area.

The physical carrying capacity is based upon the physical size of the car park, which will determine how many people can park, or the numbers of people that can get over stiles

The perceptual carrying capacity

depends upon how people see the area. If there are too many tourists people will perceive the area as crowded and be put off. Some groups will not mind people, but others, such as birdwatchers, need peace and solitude. If these high visitor numbers have degraded the environment people will perceive the area as not only crowded, but also unsightly/dirty/commercial.

The economic and social carrying capacity is exceeded when the area cannot cope with the demands from tourism, so new enterprises "spin-off" from the tourist industry. New facilities such as bunk barns, farm campsites, peak parking in farmer's fields all indicate shortages in an area's basic infrastructure.

The ecological carrying capacity is the point at which unacceptable damage occurs. Although the term "unacceptable" will vary according to your point of view and interests, the damage to vegetation caused by trampling, loss of plant species and will indicate that this threshold has been exceeded.

Evidence has been found for many different tourist impacts to the area. The main points are that,

- lots of people want to come to Malham;
- they cause positive and negative impacts to the area

The YDNPA doesn't want to stop tourists coming to Malham especially because of the money it brings to the area. The consequences of tourists visiting the area are that there will be negative impacts which have to be managed by the YDNPA to keep Malham successfully running.

How is the impact of tourism being managed? Is it sustainable?

Firstly I will refer back to the impacts talked about in research question 2.

- jobs
- traffic
- erosion / footpaths
- litter
- problems for land owners
- disruption of the local community

Because of the large number of negative tourist impacts to the area it has to be managed, as any other area in a national park. There are different groups who help to manage the area,

- YDNPA
- National Trust
- Private business and individuals as most land around Malham is privately owned
- EU, give grants to farmers for conservation

In 1996 the NDNP authority launched the "traffic and visitor management strategy" which tried to identify ways to reduce the potential for conflict between the growth of tourism and the conservation of the countryside. The ways they came up wit h aimed to:

- Maintain traffic flows at the 1994 level.
- Increase the proportion of staying visitors.
- Manage recreational routes and sites within environmental carrying capacities.
- Protect the quieter and more fragile areas of the park.
- Promote appropriate routes for coaches, caravans, 4-wheel drive vehicles etc.
- Encourage park and ride schemes.
- Implement traffic calming schemes.
- Encourage alternatives to the car for travel into and around the area.

All of these ideas and schemes are sustainable. The majority of them are concerned with traffic and how visitors travel in and out, and also and are also aimed at increasing the number of visitors staying in the village. These are sustainable because if they can come up with ways for visitors to be able come in large numbers without causing traffic problems or spoiling the beauty of the village and surrounding landscape. Also encouraging visitors to stay in the village is very sustainable because it will reduce the volume of traffic travelling in and out of the village and it will bring in more custom for local hotels, pubs and shops.