RURAL
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# COLLECTIONS TOOLKIT

Ideas about how to interpret present day concerns about climate change using collections in rural museums

Hilary McGowan & Jon Hall

April 2008

# Contents



This toolkit has been produced as part of the Rural Museums Network's *Turning Green* project. Funded by a Subject Specialist Network grant from the English MLA, it is a UK-wide project aimed at helping museums (at present specifically rural museums) address their own carbon footprint and interpret climate change for their audiences. Hilary McGowan and Jon Hall were appointed by the Network to produce the Carbon Calculator, this toolkit and organise the *Turning Green* Conference held at the Museum of English Rural Life in February 2008.

Under the direction of the Rural Museums Network's steering group – Stuart Gillis, Roy Brigden, Duncan Dornan and Catherine Wilson – many people have helped us to write this toolkit and we are grateful to you all. Our special thanks go to Maurice Davies who stimulated so much lively debate at the Conference and to David Walker of Somerset County Museums Service for his thoughtful and creative contributions.

**Hilary McGowan & Jon Hall**
April 2008

Please think of the environment and do not print this out unless absolutely necessary.

# 1 Scope of toolkit, introduction and background

## 1.1 What this toolkit does

The toolkit looks at ways of interpreting present day concerns about climate change using objects from the past – collections which may be medieval, 17th, 19th or early 20th century – and gives examples where these can be helpful. These messages can be interpreted through labels in cased displays, interpretation panels both indoors and out, printed and web-based material, costumed interpreters and demonstrations.

## 1.2 Introduction

The rural way of life did not alter in any significant way from 16th century to the late 18th century, when the Industrial and Agrarian Revolutions' huge impacts altered the way of life for all. These revolutions led to the growth of mechanisation, improved communications, and migrant populations moving off the land to work in towns and cities which grew rapidly. All of which led to the beginnings of pollution, which is where our story starts.

Global atmospheric concentrations of carbon dioxide have increased markedly since 1750 and now far exceed pre-industrial values as shown in ice cores, the UK Inter-governmental Panel on Climate Change (IPCC) concluded in 2007, following their assessment of the scientific evidence for climate change. They also concluded that they were highly confident (90% certain) that globally, the net effect of human activities since 1750 was one of warming.

As a consequence of the above, this toolkit aims to be relevant for all rural museums but is probably most, though not exclusively, relevant for those whose strength is rural history in the age of the horse – i.e. up to early 20th century.

## 1.3 International background & the British perspective

Growing recognition of the challenge of climate change in the West has resulted in individuals believing that they can make a difference through individual actions (think global, act local), and attempts by governments to limit carbon emissions.

In 1987, the World Commission on Environment and Development proposed sustainable development "which meets the needs of the present without compromising the ability of future generations to meet their own needs".

At the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, it was agreed to promote Agenda 21, a programme of environmental measures. Two thirds of actions in Agenda 21 required active involvement. In the UK, the 1993 Local Government Declaration on sustainable development, Local Agenda 21, committed local authorities to promote sustainable development actively, set environmental and quality of life targets, create partnerships across all sectors of society and share expertise.

The Kyoto Protocol is designed to cut greenhouse gas emissions. Agreed in 1997 at a United Nations Conference in Japan, this Protocol came into force in 2005. Industrialised countries agreed to cut emissions of greenhouse gasses to 5% below 1990 levels by 2010. The UK is pledged to reduce these by 12.5% below 1990 levels. HM Government is now working towards the establishment of a successor to this international framework for 2012 onwards.
In Britain now, a growing number of cultural and commercial organisations are trying to influence the way we live our energy-hungry lives. Culturally in England, the DCMS is assessing what it can do to influence its client organisations, the Society of West End Theatre in London is carrying out carbon footprint assessments and English Heritage is working with E.ON to explore and deliver initiatives that will make a tangible contribution to the goal of reducing the impact of climate change.

Your visitors will be familiar with most or all of the following, so you can tie your interpretation into present day events and debates.

Stories about climate change and a greener approach to living became a daily occurrence during 2007, with concern about pollution from plastic carrier bags seeming to invade British life:

- Modbury in Devon became the first plastic bag-free town in Britain in April 2007;
- Marks and Spencer's in late 2007 began piloting a scheme to stop giving away plastic bags in its food halls;
- all the large supermarket chains in the UK now encourage customers to bring their own bags and/or recycle used plastic ones.

The supermarkets are also now – far too slowly for many – stocking more fair trade food, free range eggs and chickens. Many famous chefs with high profiles including Jamie Oliver and Gordon Ramsey have lent their voices to this. See www.chickenout.tv for the campaign against cheap, intensive farming of chickens.

*Pret a manger*, the sandwich chain, has long been a pioneer of fair trade coffee and organic milk before they became trendy, and refuses to air freight any produce, except fresh basil leaves from Italy for making its pesto. They have been a leader in advocating fresh, seasonal food and sensible eating.

Marks & Spencer's *"Plan A. Because there is no Plan B"* has raised the public's consciousness about fair trade cotton for example, and has demonstrated that a social conscience can still have a place in a successful business.

# 2 Green Facts

- Eleven of the twelve years between 1995 and 2006 are amongst the 12 warmest years in the records of global surface temperature, available since 1850.

- Changes to extreme temperatures have been observed over the last 50 years: cold days, cold nights and frosts are now less frequent, and hot days, hot nights and heat waves are more frequent.

- The Inter-governmental Panel on Climate Change predicts an average rise in global sea levels of between 0.18mm and 0.59mm by the end of the 21st century.

- Over-fishing is a global problem but in the North Atlantic alone, fish catches have dropped in volume by 25% since 1970.

- When boiling a kettle, if everyone boiled only enough water for their needs for just one day, we could save enough energy to light every street in Britain the following night.

- If everyone in the UK switched off their televisions every night, not left them on standby, we would save £50m per year. A PC uses 80W when turned on and only 4W when turned off; a photocopier uses 100W when in standby. So if everyone turned off their computers, printers and photocopiers too, we could save even more.

- One hectare of mature woodland can absorb the carbon emissions of 100 average family cars driven for a year.

- The average Briton uses a 150 litres of water per day, whereas the average in Mozambique is 10 litres. (source: Save the Children Fund www.savethechildren.org.uk/fillupyourhead )

- The Energy Saving Trust estimates that if we all used our washing machines at 30°C instead of 40°C, we would save 40% of energy per wash; this could save enough electricity to light the UK's street lamps for 10 months. (source: Marks & Spencer plc)

- In February 2008, China's largest plastic bag maker closed following a state-led environmental campaign discouraging the use of plastics. In January, China banned production of ultra-thin plastic bags, forbidding its supermarkets and shops from handing out free carrier bags from 1st June 2008. China currently uses up to 3 billion plastic bags per day. (source: Reuters, 26th February 2008)

- Food and garden waste accounts for 20% of the UK's methane emissions from landfill (source: DEFRA)

# 3 Checklist of green questions to ask yourself

- Do you have an environmental policy setting out the museum's green objectives?
- Do senior managers and trustees/councillors support the policy to minimise the museum's environmental impact?
- Are all staff trained in environmental awareness?
- Have you used the Rural Museums Network's Carbon Calculator to assess the size of your task and which upon areas you should be concentrating?
- Have you carried out an environmental audit of your organisation and its buildings?
- Do you monitor the amount of energy you use, and where?
- Is a working group or an individual responsible for making improvements and monitoring progress?
- Have you set targets for reducing energy, water and waste?
- Do you strike a balance between the needs of the collection, staff and visitors against the museum's impact on the environment?
- Do you invest in plant and equipment that will reduce your environmental impact?
- Do your ICT systems allow staff to work from home?
- Do you choose recycled materials where they are available?
- Do you recycle as much as you can?

- Do you encourage visitors and staff, to walk, cycle or use public transport rather than private cars?
- Do you provide secure storage for bicycles of staff and visitors?
- Are bus stops and railway stations clearly marked on your website and marketing materials?
- Do you source goods locally to reduce transport carbon emissions?
- Do you assess the environmental impact of your projects at the planning stage?
- If there is a green space surrounding your museum? If so, do you care for it in a green way; if you do not care for it, have you encouraged whoever does so to be greener?
- Do you encourage biodiversity in the museum's surrounding area?
- Do you make sure your organisation is seen to be green?
- Can you say how well you are meeting green targets?
- Do you compare your organisation's progress against similar ones?

with acknowledgements and thanks to David Martin (ed.), Working Knowledge, Museum Practice, issue 33, Spring 2006, Museums Association

# 4 Matrix of themes and collections

Select the types of objects in your museum's collection along the top row and look down to see which themes link most closely with them, using the crosses within the matrix compartments.

For a summary of which objects are included under which heading, see the next section. On the following pages is a more detailed discussion of each main theme listed on the left below and how they can relate to both the present day and the climate change topic.

| Themes | Type of Objects | | | | | | |
|---|---|---|---|---|---|---|---|
| | farm machinery | hand tools & related objects | food related equipment | clothing inc. working dress | domestic tools & implements | buildings, homes & related tools | craft machinery & tools |
| The best of times | ◇ | ◇ | ◇ | ◇◇ | ◇◇ | ◇ | ◇◇ |
| Growing your own | ◇ | ◇ | ◇ | | ◇ | ◇ | |
| Food miles v. local | ◇◇ | ◇ | ◇ | ◇ | | ◇ | |
| Make do and mend | ◇ | ◇ | ◇ | ◇◇ | | ◇ | ◇◇ |
| Recycling | | ◇ | | ◇◇ | ◇◇ | ◇◇ | |
| Technology | ◇ | ◇◇ | ◇ | | ◇◇ | ◇ | ◇◇ |

◇ related objects ◇◇ very closely related objects not easily related

# 5 Details of matrix: the object groupings

## 5.1 Farm implements, hand tools and related objects

Farm implements and machinery such as ploughs, tractors, threshing machines, cultivators, harrows, hand carts, wagons, cider presses, winnowing machines, drills, reapers, binders, root lifters and pulpers, manure spreaders. Some larger machinery is horse drawn/powered, some not.

Hand tools and related objects include forks, peat shovels, rakes, sieves, spades, sickles, scythes, trowels and trugs, knives, brooms and besoms, horse-related equipment such as harness, bits, combs, nose-bags, saddles and stirrups.

## 5.2 Food-related equipment, agricultural and domestic

Equipment used in the production of milk, butter and cheese for both domestic consumption and for sale: milking stools and pails, churns, butter beaters, cheese vats and presses, curd knives, sieves and muslin bags. Also for raising animals, killing them and preparing them for both sale and domestic consumption: pails, baskets, knives, branding tools, meat hanging hooks; beehives and associated tools.

## 5.3 Clothing, including working dress, and soft furnishings

Women's, men's and children's clothing of all types, not just everyday and working dress but also clothing for “best” as these will often show alterations for different people over time. Working dress includes garments which will have regional variations in smocking and embroidery, also other protective clothing such as leggings, beekeeper's hats. All types of floor coverings including rag rugs, bed linen, quilts, blankets, cushions, curtains, blinds, personal linen such as towels and cloths.

## 5.4 Domestic tools and implements

Domestic equipment such that concerned with food preparation and consumption, personal hygiene and daily life. For example, cooking pots and pans, kettles, butter dishes, jars, jugs, bowls and other containers, tea caddies, decanters, eating crockery, cutlery and glassware; ceramic bowls and ewers, wash boards, dolly tubs and sticks; lighting such as candles, candle sticks and snuffers, oil lamps, rush lights, gas and electric fittings and shades, gas mantles and light bulbs.

## 5.5 Buildings, domestic and agricultural, related tools and contents

Barns, cow sheds, piggeries, stables, shepherd's huts, hay ricks, chicken sheds, dovecots; houses, cottages; wind and water powered mills for different uses, their fixtures, fittings and contents. Domestic furniture, ornaments and personal possessions.

## 5.6 Craft machinery and tools

Craft tools, machinery and goods made by such as blacksmith, carpenter/joiner, carter, cooper, miner, thatcher, wheelwright. Links can be made here to surnames also.

# 6 Ideas and themes

These themes represent different approaches to interpreting rural collections in the light of present day climate change. In many cases these themes are already in use in museums but how they are interpreted does not necessarily link to present day concerns. The themes are not self contained and most have a significant amount of overlap between them. They use facts about the objects and social history of a particular period, linked by the concept of a time bridge, to the present day with its climate change reality. They should help you not only to interpret your collections around a green theme but to prompt your audiences to think about their lifestyles and carbon footprints. Can we learn lessons from how our ancestors coped with threats to their world, albeit on a more localised scale from global climate change but threats nonetheless?

## 6.1 The best of times, the worst of times?

Traditional ways of living and working in a rural area can be seen as a general measure of what worked, given the particular climate, soil types, and natural resources available. This often leads us to take a view of humans and nature existing in bucolic harmony, the rural idyll of living off the fat of the land. The idea of the noble peasant dates from the rediscovery of the countryside in the 18th century.

However in reality, because of scarce resources, harsh environments and times of strife, many societies have existed on the margins, with people surviving only by eking out a hard living. Thomas Hardy depicts this struggle for existence, as does Dickens at the beginning of Great Expectations. Poets such as Robert Burns, John Clare and A.E. Houseman appear to celebrate this ideal though they all knew the realities.

It is in these limited circumstances that human ingenuity and flexibility came into its own. Very little was wasted (as the following themes outline), alternative resources were used, and society developed to take into account these circumstances.

The collections of rural museums thus reflect daily life in an agrarian society. They chart the changes that have brought us to today's post-industrial global society where we have a very different set of threats to our survival.

**What do the objects in your collection have to say about both the circumstances of their time and ours today? Can we learn from them?**
**Did a strong community and/or an extended family make it easier to cope?**

## 6.2 Growing your own: everything but the squeak

Until the Industrial Revolution led to many moving away from the land, most people grew their own food in differing ways and on differing scales.

Dairying probably originated in Neolithic times, when man first began to keep livestock, so it has been with us for much longer than other types of husbandry. At first sheep and goats were the chief sources of milk but by 16th century, the cow had become the principal dairy animal. At this period most cottagers had their own cow and processed its products for their own use. However, by the mid-18th century, many farmers were specialising in the production of milk, butter and cheese for sale as the market for these products grew and communications improved so the goods could get to market while still fresh.

Non-dairy animals were slaughtered in November as there was less for them to eat during the winter (and they could not usually be outside all the time). Nothing was wasted: meat was salted, pickled and smoked to preserve it, so it would last longer; hooves used to make glue or natural fertiliser; horn could make mugs, handles for knives or panes for lanterns; fat used for soap and candles; skin (could be

tanned) for clothing, bottles and harness. The meat would all be used on the spot almost, so there was no travelling for the animal or the meat. Hence the saying about wasting nothing: when the domestic pig was slaughtered, everything was used but the squeak.

In the next section, ***How these can work in practice***, there is an example of how a cow in a rural museum can be used to illustrate many aspects of this theme.

**Contrast today:** few families are able to keep livestock (unlike some celebrity chefs such as Gordon Ramsey and Hugh Fearnley-Whittingstall). Though some do keep a few hens, pigs and goats would be problematic in suburbia and not as easy as portrayed in the 1970's television sitcom The Good Life. For those of us shopping, now the best joints of meat are always available, offal is unfashionable, much food is wasted and scraps from food/meat processing plants are used for pet food. Meat can be kept in a domestic freezer, so it keeps easily. It travels to the slaughter house – frightened animals, pollution from the lorries – and then moves on to preparation sites before travelling via distribution centres to shops (more lorry pollution), to be bought by a customer who, more than likely, also drives home with the meat. However, 500,000 tonnes of waste food is thrown away every year, with potatoes, apples, tomatoes and bananas being the most popular items (source: Research by Waste and Resources Action Programme, see www.lovefoodhatewaste.com)

**Waste not, want not? Do we waste too much food and what can be done? Should more of us try to keep livestock or have allotments?**

## 6.3 Growing your own: food miles v. local

Up to the mid-19th century, growing your own food was less unusual than now, as most rural workers could not afford to buy bread baked by someone else as we might do today (even if they lived when commercial bakers existed). If you did not grow all your own food, then it probably did not travel very far before it got to your table. If you worked on, say a home farm, you grew food for the Big House, but didn't get much or any of this for yourself, so would still have kept a pig and had a kitchen garden for vegetables, herbs and fruit.

As the Industrial Revolution had a major impact on population, both in its growth and concentration in cities and towns, cheap food was imported from abroad, so this is not a late 20th century phenomenon. From the 1840's, wheat was imported from USA and from 1870's onwards, refrigerated transport meant that beef was imported from South America, and lamb and dairy products from Australia and New Zealand. This imported food was cheap, fed the rapidly expanding population in their smoky towns but caused distress to the farmers of Britain who lost business. The general public are probably not aware how long ago food began to be imported by Britain.

Village bakeries are common from early 18th century and there were often shared bread ovens in hamlets. The big technological breakthrough in mid-19th century was the range which gave everyone a fire for warmth, cooking and hot water, and an oven.

In the next section, ***How these can work in practice***, there is an example of how a cow in a rural museum can be used to illustrate many aspects of this theme.

**Literary reference:** Cranford, the peasant woman carrying a pot of hot stew back from the bakehouse as she did not have a fire to cook it on, c.1840 (Captain Brown helped her home when she tripped and fell, much to the shock of the ladies of the town).

**Contrast today:** Farmers' markets – most rural museums will have them nearby and can use posters for them to illustrate food miles. How many museums sell local produce? The Eden Project sources all its food locally. Many supermarkets now show if the food has been air freighted by using a symbol of an aeroplane, so it is easy for the customer to spot (use labels from fruit and vegetables to illustrate this).

**Fairtrade:** buying fair trade asparagus from Peru is not necessarily bad, as these farmers will have much smaller carbon footprints than their equivalents growing under glass in western Europe, and economically it could be crucial to support them.

**Is buying out-of-season food OK if it has been air freighted to Britain but comes from a fair trade source?**

## 6.4 Making your own: *make do and mend*

Until the end of the 19th century, making all own clothes (or getting them made for you) was the norm for all. The availability of domestic sewing machines from 1860's (Singer opened their first UK factory in Glasgow in 1867) meant that many could make their own clothing. Off-the-peg, ready to wear clothes only came following material mass produced in factories, e.g. wool and cotton from the mills of the north of England and southern Scotland.

Therefore clothes were very expensive and a major investment. They were routinely altered for younger members of the family until they wore out, then the material was used for making rag rugs or as cleaning cloths. Special clothing such as a wedding dress would be altered to be worn for other occasions, up to the 1950's. Many women's dresses in collections will show signs of being altered in size or modified in style. Re-trimming a dress or a bonnet could prevent it being recognised as an old garment for ladies trying to maintain a prosperous appearances on a low income.

Edwardian-born women often hoarded pieces of string, usually found in the drawer of a kitchen dresser or sideboard by surprised descendants when clearing out a house, so the attitude was not just confined to clothing. This *make do and mend* mentality was encouraged during the shortages of the Second World War too. It continued up to 1960's when synthetic fibres were introduced into fabrics and the price of clothing dropped significantly as more prosperous times arrived. This attitude is most easily illustrated by all the stuff which rural museums now hold, as rural communities used and adapted everything, rather than buying or making new.

**Contrast today:** Museums can use advertisements from retailers in their area for sales of clothing, particularly fair trade cotton clothing. M&S launched a *take your clothes to Oxfam* offer in early 2008, by Oxfam giving M&S money-off vouchers in return for M&S clothes. If you have a local M&S, they may be interested in sponsoring a display or an event.

**Charity shops/recycling bins at supermarkets – are these today's equivalent of the rag rug?**

## 6.5 Recycling

Glass milk bottles are the most obvious ones to use to illustrate this but many children today will not be familiar with them and expect milk to come out of a plastic carton. But they are an example of how present day families can be active recyclers very easily as the big dairies now strive to deliver earlier each day before people go to work. The bottles for lemonade and other soft drinks were made of glass until the 1970's and until then they had a small deposit which you got back when you returned the empty bottle to the shop. The Campaign to Protect Rural England's Stop the Drop campaign against litter and fly tipping in the countryside, fronted by their President Bill Bryson, has revived the idea of deposits on containers, especially cans. See also 7.2 *Daisy the Cow.*

Museums also have examples of things which were made for one thing but then adapted for something else, e.g. rag rugs (from mid-19th century onwards), dresses or suits altered for someone else (any period up to 1950's), wedding dress made into an evening dress (1940's). Also see above *Make do and mend.*

In the next section, ***How these can work in practice***, there is an example of how vegetable oil used in a museum café can be used not just to illustrate this theme, but to assist in improving your carbon footprint.

**Contrast today:** recycling bins at supermarkets/council tips: now more wine bottles; the decline of the doorstep milk delivery and rise of plastic milk carton (with their attendant disposal problems) – is

this an impact of mothers going out to work again after 1960's? – and different recycling schemes of local authorities such as domestic collections of unsorted waste by some but not by others: is the attitude of your local authority a mirror of local opinion in your area or not?
Innocent, the company which specialises in fruit drinks and smoothies, encourages children to lobby their local authority to take drinks cartons such as theirs in recycling schemes.

**Charity shops/recycling bins at supermarkets – are these today's equivalent of the rag rug?**

## 6.6 Technology in rural life

The rural way of life did not alter fundamentally in Britain from early 16th century to the mid-18th century. The nineteenth century was one of huge technological strides (like the late 20th) which had an impact on the way of life of all, not just in urban areas.

In the countryside, museums reflect the use and decline of horses, replaced by ever more complex farm machinery; wooden and then metal tools and machinery as the technological breakthrough of the Industrial Revolution gave benefits.

Man's ingenuity to solve problems can be illustrated many different ways: at the beginning of the 19th century, the Napoleonic Wars and a series of poor harvests made grain scarce throughout a large part of western Europe. Consequently, horses were very expensive to keep and they provided most human transport. In Germany, Karl Drais invented a machine that would replace horsepower with human power. He patented his two-wheeled velocipede in 1817, so setting out on the road of the bicycle.

Water-powered mills have been in use for a long time, e.g. the Romans used them, and windmills are medieval in origin. Both are therefore part of a pre-industrial scene for museums. Will windmills come back into fashion with rising fuel prices and the use of wind turbines?

In the next section, ***How these can work in practice***, there are two examples of how farm machinery and windmills, can be used to illustrate this theme.

**Contrast today**: are there wind turbines near your museum? Have houses or other buildings near to you got solar panels or similar? Can GM animals and crops solve the world's food crisis if they can be more efficient and provide more from less space? Are the ethical problems surrounding the concept of GM a valid reason not to develop it?

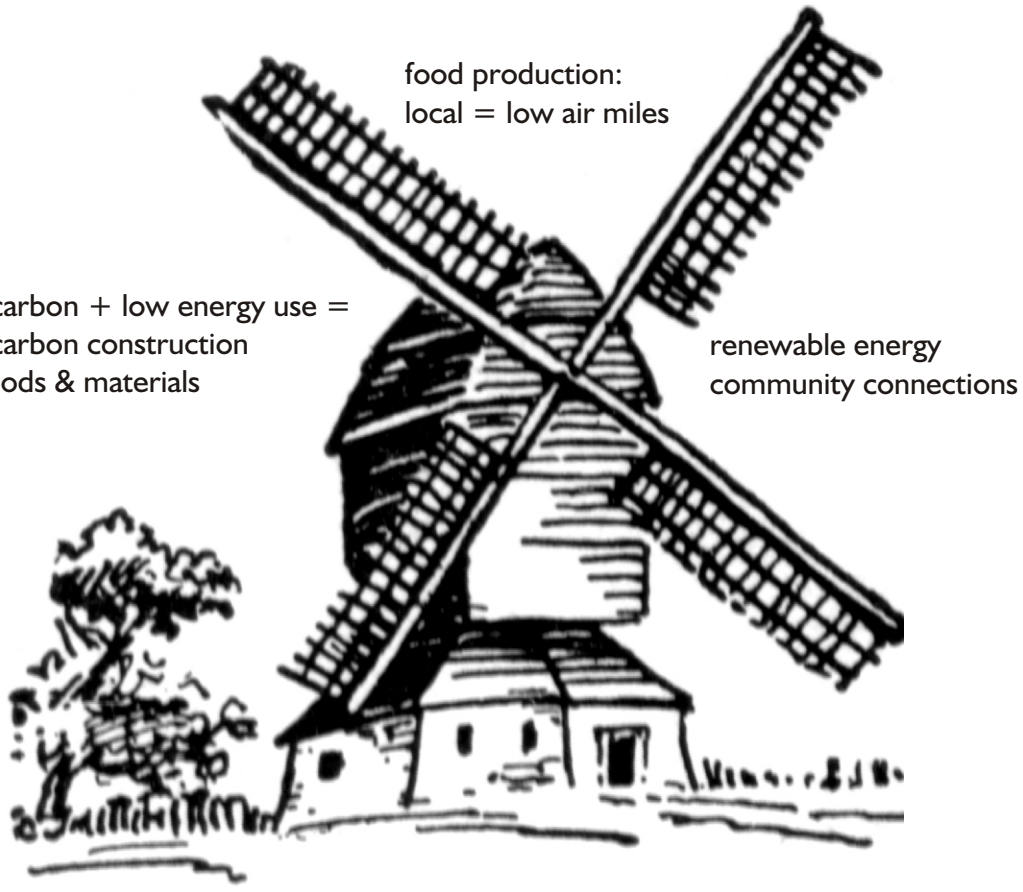
**Can museums provide a safe debating place concerning the ethics and impacts of the technological advances which many fear?**
**Should museums support farmers by showing the other side of the argument?**

# 7 How these ideas can work in practice

The following illustrations come from the delegates in Maurice Davies' session at the *Turning Green* conference in February 2008. The Rural Museums Network is very grateful for their help. These illustrations give some examples of how the concepts and ideas described above can be put into practice in your museum. They also demonstrate that these themes will not confine your interpretation to displays of objects but can be used throughout the museum and with all audiences (and they're fun!)

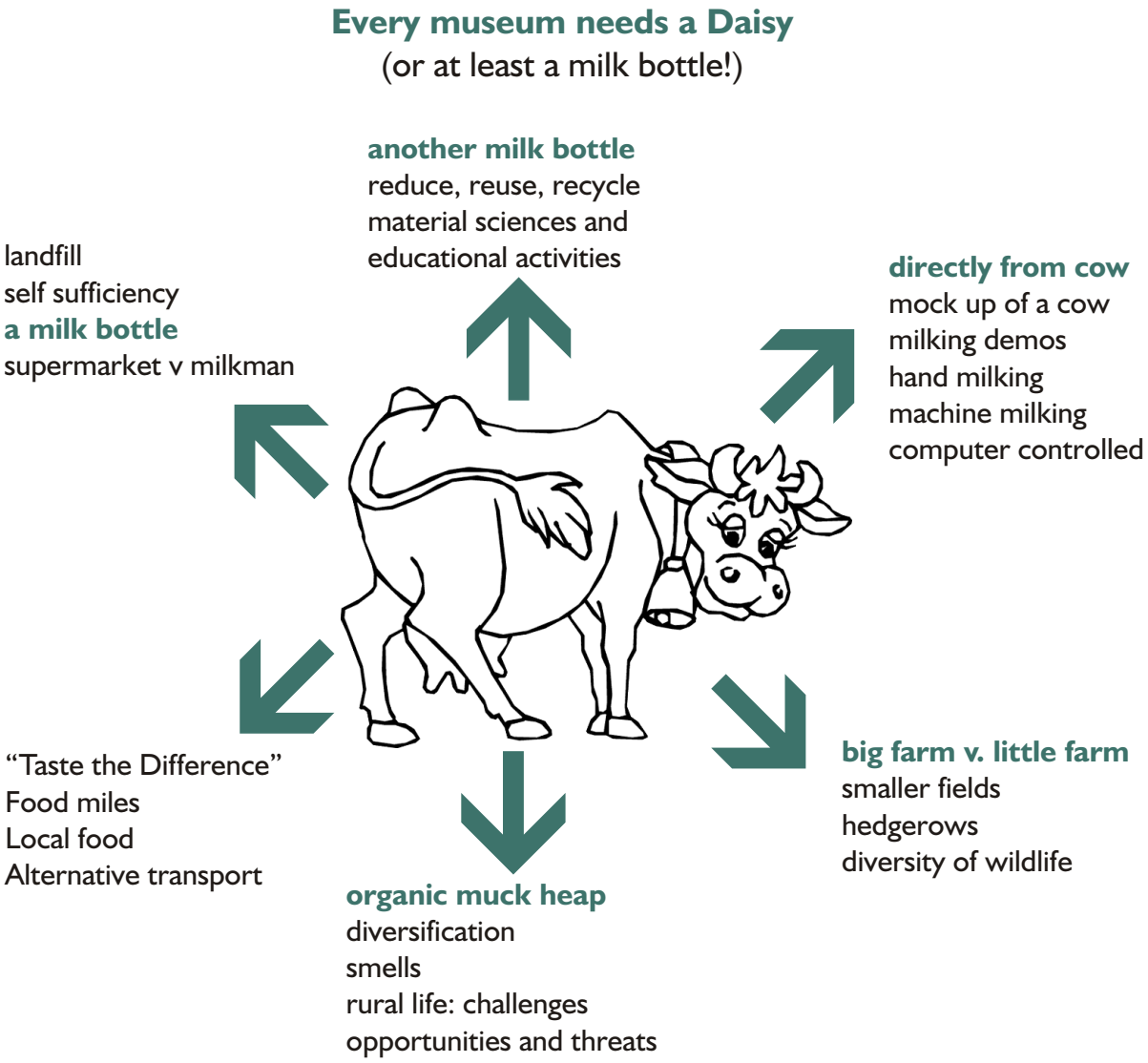
## 7.1 Windpower

"Look your worship… those things which you can see over there are not giants but windmills."
Don Quixote by Cervantes, 1605



## 7.2 Daisy the Cow

This illustrates how the cow was at the centre of the rural community and can be used to show how much more efficient and natural was this way of life. It uses both historic and present day objects, animals and demonstrations. It also can support interpretation of present day recycling stories, e.g. glass milk bottles delivered to your door being greener than plastic milk cartons which you buy in a supermarket. Consequently, it links particularly to three of the themes above: nos. 2 & 3, Growing your own, and no. 5, Recycling.



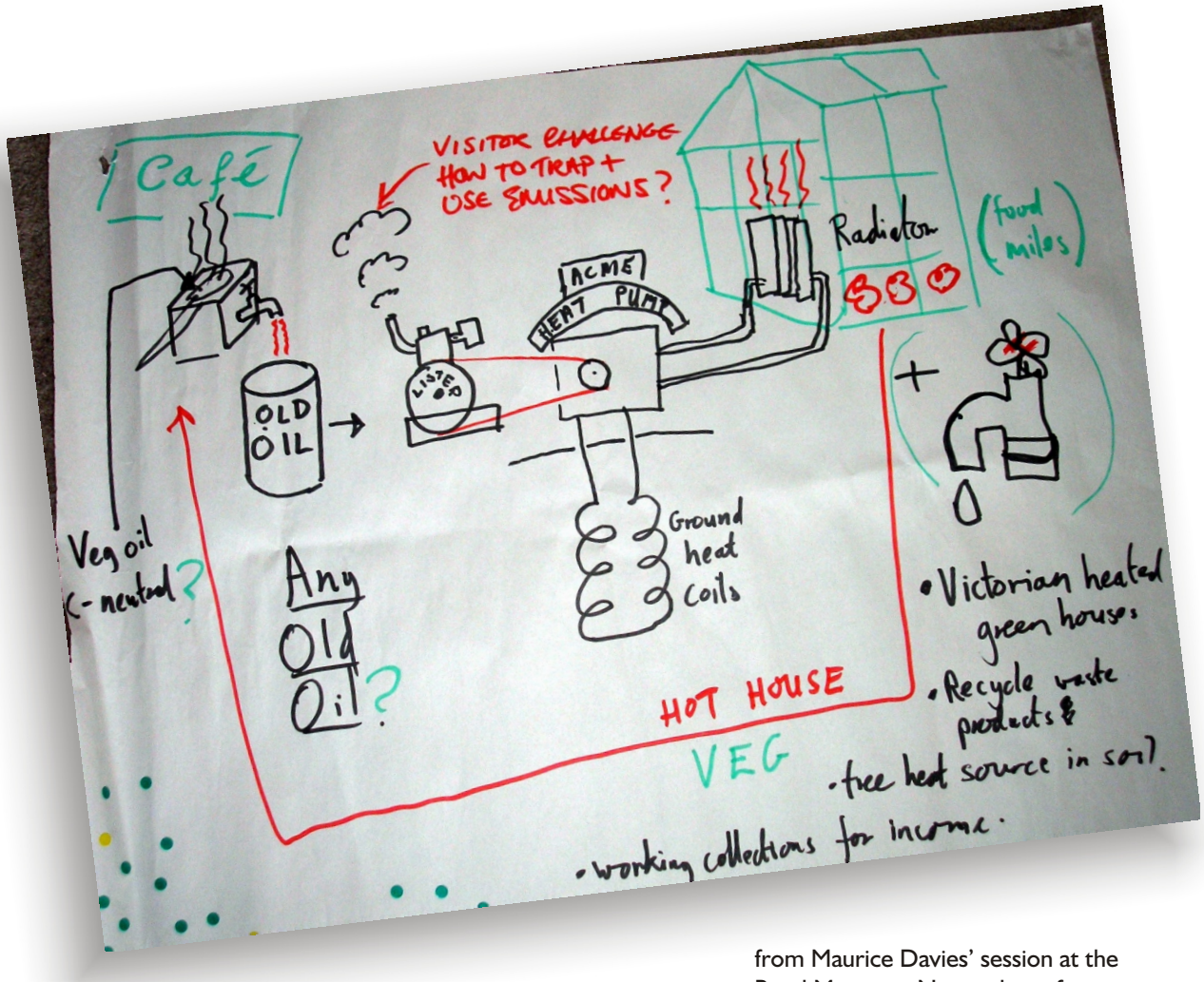
## 7.3 The Museum Café

This illustrates how *Any Old Oil?* can become useful for rural museums which have catering. It also shows that even present day activities such as running a café, can be used to help the museum's carbon footprint and encourage the visitors to understand and debate the challenge of climate change. It links to theme no 5 above, Recycling.

From the top left corner on the drawing, where the Museum café is situated, comes old vegetable oil with a tap into a container labelled "old oil". Arrows from the oil container indicate how the oil can be used via a Lister engine to a machine called the "Acme Heat Pump", with steam coming out of it, and below it, ground source heat coils, drawing heat from the ground. From the heat pump, pipes go into the top right hand corner, to a greenhouse containing radiators, lots of heat and a hot tap, where vegetables and fruit are being grown which then (shown by the red arrow) go back round to the top left corner to be used in the café.

Working collections can help the museum to earn income in addition to supporting the climate change story. This use of old oil not only helps to heat Victorian green houses and makes them both usable and more affordable, but helps to recycle waste products which are difficult to dispose of and, coupled with a ground source heat pump, is an example of heating using greener sources of energy.

This also poses a **Visitor challenge: how to trap and use emissions?**




from Maurice Davies' session at the Rural Museums Network conference *Turning Green* February 2008

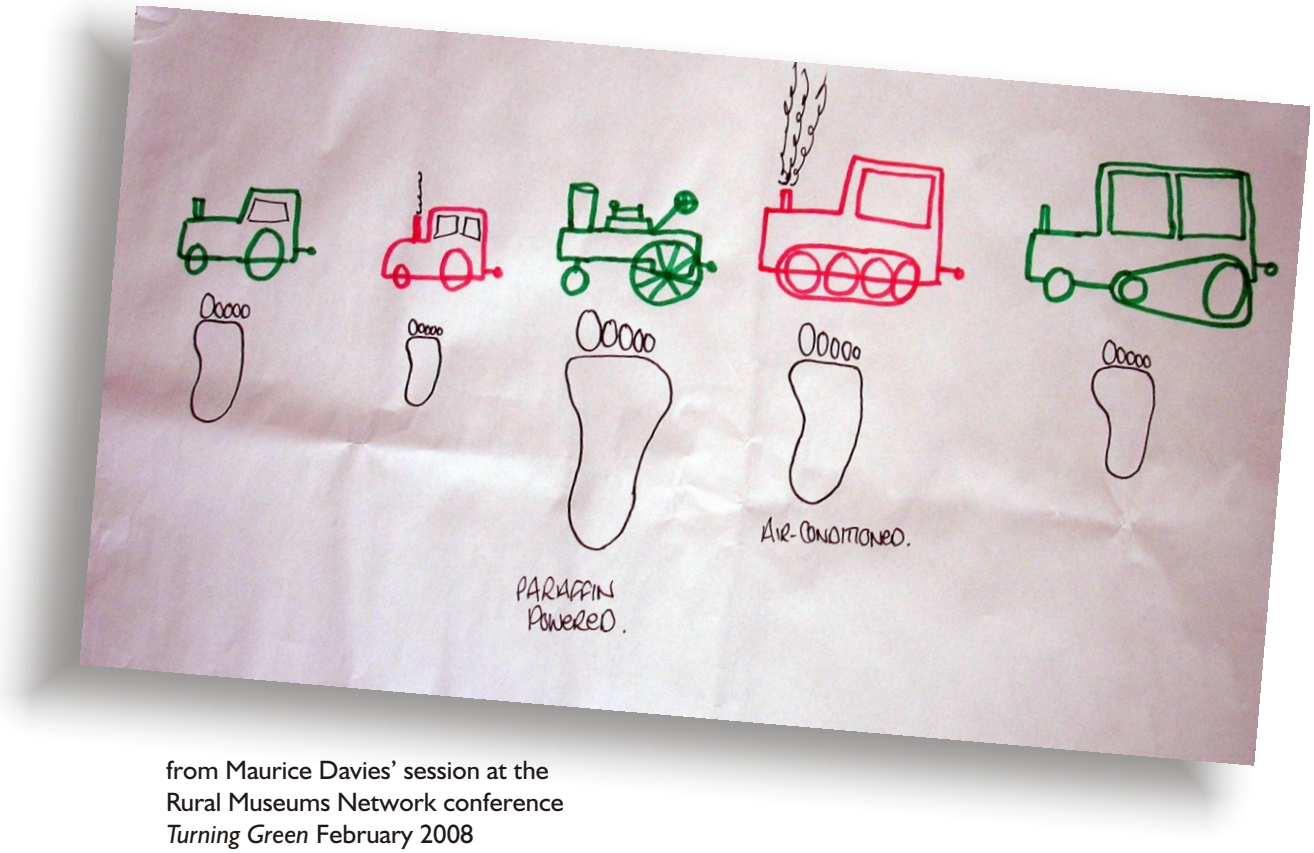
## 7.4 The carbon footprints of farmers

This links to theme no 6 above, Technology.

The row of tractors illustrates different types of vehicle, powered by different types of fuel, some with a larger carbon footprint than others: petrol, coal/steam, paraffin, diesel, bio-fuels.

Beneath each tractor is a footprint, and all are of differing sizes: smallish for petrol, bigger for coal, huge for paraffin, slightly smaller for the present day one (but the tractor has an air conditioned cab) and could it be much smaller for the future? Also the impact of chemicals for fertilisers and pest control increased the carbon footprint of all farmers in 20th century, in addition to devastating wildlife.

This theme could be used more widely showing a hand driven plough and a horse/ox-pulled plough preceding the tractors with tiny footprints for both (but how much methane do oxen and horses produce, are they like cows?)




from Maurice Davies' session at the
Rural Museums Network conference
*Turning Green* February 2008

# 8 Bibliography

## 8.1 Organisations and Websites

**Cadw**: has a range of conservation-related publications available to download www.cadw.wales.gov.uk

**The Carbon Trust**: set up by UK Government in 2001 as an independent company. Their mission is to accelerate the move to a low carbon economy by working with organisations to reduce carbon emissions and develop commercial low carbon technologies www.carbontrust.co.uk

**Centre for Alternative Energy**: has helped to compile the carbon calculator for RMN's *Turning Green* project www.cat.org.uk

**Campaign to Protect Rural England: *Stop the Drop*** campaign against litter and fly tipping, 2008, see www.cpre.org.uk/campaigns/stop-the-drop

**Creswell Crags**: Creswell Heritage Trust's new museum, opening in 2009, tells the story of this Ice Age site and how inhabitants coped with their version of climate change, www.creswell-crags.org.uk

**English Heritage**: many good publications and advice for museums and individuals caring for historic buildings and landscapes. Also see list of publications below.
www.english-heritage.org.uk

English Heritage has teamed up with E.ON for a three year collaboration to explore and deliver initiatives that will make a tangible contribution to the goal of reducing the impact of climate change: www.english-heritage.org.uk/server/show/ConWebDoc.13074

**Fairtrade**: www.fairtrade.org.uk

**Gilbert White's House and The Oates Museum**, Selborne, Hampshire
www.gilbertwhiteshouse.org

**Historic Environment – Local Management** has a website of useful publications, including many of the above, see www.helm.org.uk/climatechange

**Historic Scotland**: has specific conservation publications for historic buildings and landscape www.historic-scotland.gov.uk

**Hugh Fearnley-Whittingstall's** River Cottage books, DVD's and television programmes are summarised at www.rivercottage.net which includes recipes for such as home cured bacon for those able to keep livestock.
See also www.chickenout.tv for the campaign against battery chickens.

**Marks and Spencer: *Plan A. Because there is no Plan B.*** – see www.marksandspencer.co.uk/planA
M&S is a partner in the *We're in this Together* campaign – see www.together.com

**Museum of English Rural Life**: has a *Sustainability Past and Present* exhibition and the banners from here can be accessed via www.ruralmuseumsnetwork.org.uk/cms/images/banners-v6.pdf
Also www.merl.org.uk/online_exhibitions/ruralcrafts shows short extracts of the films from Rural Crafts Today a film project at the Museum of English Rural Life, 2006-08, and fuller versions can be viewed in the Museum gallery, with the complete films available in the Museum's Archive. (Also see under publications below).

**National Energy Foundation**: has renewable energy pages at www.nef.org.uk and at www.greenenergy.org.uk

**The Office of Climate Change**: established in October 2006 to coordinate climate change policy across Governments in the UK, see www.occ.gov.uk

**Trees and native plants**:
www.woodland-trust.org.uk
www.futureforests.com

**British Trust for Conservation Volunteers**: see www.btcv.org

## 8.2 Publications

Carson, Rachel, The Silent Spring, 1965, Penguin Modern Classics

Cassar, May, Climate Change and the Historic Environment, 2005, Centre for Sustainable Heritage, University College London

Diamond, Jared, Collapse - how societies choose to fail or survive, 2005, Allen Lane, London

Greener living: a quick guide, see www.direct.gov.uk

McDonough, W. & Braungart, M., Cradle to Cradle: remaking the way we make things, 2002, North Point Press, New York

Museum of English Rural Life, Rural Crafts Today: a film project at the Museum of English Rural Life 2006-08, 2008. This includes a summary section of research on "Rural crafts and trades collections today" (pp 26 - 34) by Linda and David Viner, with accompanying CD.

This project was about connecting MERL's craft collections with the people, skills and places associated with rural crafts in the countryside today. During 2006-7, ten very different craft subjects were filmed in different parts of the country recording the process, with extensive interviews with the craftsmen to discover more about present and future prospects for rural craftsmanship in the 21st century.

www.merl.org.uk/online_exhibitions/ruralcrafts shows short extracts and fuller versions can be viewed in the Museum gallery, with the complete films available in the Museum's Archive.

Moss, Linda, Organic Places to Stay in the UK, (2nd ed.), 2008

RIBA & CABE, Climate Change Briefing and Low Carbon Design Tools, 2007, London

Sawday, Alastair, Go Slow England: special places to stay, slow travel and slow food, 2008

Seymour, John, The new complete book of Self Sufficiency, Dorling Kindersley, 2003
Stern, Sir Nicholas, The Economics of Climate Change: The Stern Review, 2007, Cambridge University Press

UKCIP08:UK Climate Impacts Programme Scenarios Gateway,
see www.ukcip08.org.uk/scenarios/ukcip08

White, Gilbert (1720-93), A Natural History of Selborne, 1789, Penguin Classics 1977
**English Heritage** publications:

*Adapting to Climate Change*, Conservation Bulletin Issue 57, Spring 2008
After the Storms, 1997 (product code XH20065)
Building Regulations and Historic Buildings, 2004 (50900)
Climate Change and the Historic Environment, 2008 (51392)
Energy Conservation in Traditional Buildings, 2007 (51367)
*Flooding and Historic Buildings*, Technical Advice Note, 2004 (50776)
Wind Energy and the Historic Environment, 2005 (51099)

Cutting down on carbon: improving the energy efficiency of Historic Buildings, Summary of Government Historic Estates Unit's Annual Seminar, October 2007, see www.helm.org.uk/climatechange

**Shire publications**: many and varied covering collections, rural trades and crafts, available from them by mail order at www.shirebooks.com, or from Amazon, or from a museum shop! Now owned by Osprey Publishing.

## 8.3 Periodicals

David Martin (ed.), Working Knowledge section, Museum Practice, issue 33, Spring 2006, Museums Association:

> *Going green: Green goals* (museums reducing their environmental impact); *The green door* (developing a museum environmental policy); *Ideals into action* (purchasing, transport and recycling policies); *Power talk* (cutting energy and water use).

Case studies: *Gibson Mill, The Lady Denman Heritage Complex, In the balance* (environmental impact of collections care).

Museum Practice is available online for all MA members and MP subscribers.

Other Museum Practice articles:

*Built with care,* Flemmich Webb, issue 30, 2005: the practical steps museums need to take to meet forthcoming green standards for new buildings.

*Emergency planning*, issue 29, 2005: climate change and rising sea levels call for effective emergency plans if museums are to minimise the risks from flooding and other disasters.

*Update on environment: the route to sustainability*, Mary Cassar and David Martin, issue 12, 1999: a guide to how museums can contribute to the objectives of sustainable development.

Various authors, Farming Link, DEFRA, June 2007:

> *Climate Change: Food labelling* (increased environmental labelling); *The impact of climate change, farmers already feeling the change* (survey); *Olives from England* (Otter Farm, Devon); *Livestock emissions* (reducing the environmental impact of methane and nitrogen from animals).

**The Collections Toolkit,** compiled and written by Hilary McGowan and designed and produced by Jon Hall for the Rural Museums Network 

**Hilary McGowan**
Museum & Heritage Consultant
The Old Surgery
Oldmixon Manor
Oldmixon
Weston-super-Mare
Somerset
BS24 9PB

01934 811955
office@hilarymcgowan.co.uk

**Jon Hall**
Heritage Resource Agency
48A Over Lane
Almondsbury
Bristol
South Gloucestershire
BS32 4BW

01454 617171
jon@heritageresource.co.uk

RURAL

museumsnetwork.org.uk