

28 January 2013 - Beyond the farm

Discovering Our Countryside provides a clear, interesting and informative picture of the important role of agriculture and rural affairs in the lives of pupils from an early age, the films and commentaries have been developed specifically to enhance the work that you are doing in your own classrooms.

These are the scripts and associated teaching links and notes for the program of 14 January 2013

Teaching links.

Below are this program's specific links to:

- National Curriculum
- The 9 Eco School topics.
- National Government initiatives:
 - Healthy Schools
 - Sustainable Schools
 - Every Child Matters
 - Learning Outside the Classroom
- Thinking Skills.

Note on National Curriculum links

The National Curriculum subjects and the units from the QCA schemes of work. (Rather than list each specific National Curriculum objective we have simply listed the QCA Units as these are already linked to the National Curriculum and are generally what schools reference when planning work.)

These will allow you to easily link each program into your existing work.

The programs can also be used to promote interaction by children in pairs and groups, circle time or class discussion, encouraging learning through discussion and interaction

Discovering Our Countryside is a modular approach to rural affairs - we hope you and your pupils will look forward to each new episode as it paints the picture of the rural environment and it's seasonality.

Specific links for this weeks program sections:

28 January 2013 - Beyond the Farm

Details of this program

This program looks Beyond the Farm in that it concentrates a bit on beyond what people view as they farm i.e. the field and cattle shed, and looks at what happens to products after they have been harvested – either directly on the farm or after they leave the farm.

- **Milk beyond the farm** – Shows that the safety of this important foodstuff starts with storage on the farm and then shows how it is treated to keep it safe to consume and then how it is packed into the cartons of liquid milk you buy as a consumer.
- **Potatoes beyond the farm** – This shows how the surplus of harvest is stored and gradually used to keep the shops of Britain supplied year round – without the need for ‘fresh’ imports of potatoes from abroad as some shops would have you believe. It also shows how one of our favourite potato products is made - Crisps!.
- **Water Water everywhere** - We had intended to revisit our wood, but like everywhere else it is very wet or even flooded. So instead we look at the effects of the floods on farming and the countryside and also look at why water is so important to farming and food production.

These sections can also be found on the relevant topic page, which over the weeks will build up the seasonality picture for each of the main themes: Crops / Arable; Livestock; Wolds Heritage

NATIONAL CURRICULUM SUBJECTS LINKS.

Design and Technology KS 1 + 2

Looks how farmers use modern technology to grow crops and provide fresh 5-a-day produce

Give examples of different vehicles and also how the wheat is grown which is milled to make flour to bake bread and biscuits.

Relevant QCA Schemes of Work

Unit 1c Eat More Fruit and Vegetables

Unit 2A. Vehicles

Science KS 1 + 2

The videos have lots of science links to the units listed below for example:

Shows the start of plants life cycles and what parts of a plant we use and harvest.

Looks at how we can help bees so important to many of the plant food crops we rely on

Some of machinery could be used to discuss pushes and pulls.

Relevant QCA Schemes of Work

Unit 1B. Growing plants.

Unit 1E Pushes and Pulls.

Unit 2A Health and Grow.

Unit 2B Plants and Animals.

Discovering Our Countryside - Teachers Notes

Unit 3B. Helping plants grow well.

Unit 5B. Life cycles.

These are just the links we thought of – please let us know if you make any more!

Citizenship KS 1 + 2

E.g. Shows how farmers look after animals.

Relevant QCA Schemes of Work

Unit 3 Animals and Us

ECO SCHOOL TOPIC LINKS

With apologies if we are ‘teaching grandma to suck eggs’ here are some of our thoughts on how our videos link to the Eco School Topics

Showing pupils just which of their food products are grown in this country will give them important background knowledge when discussing transport, energy and global perspective of food production and the healthy living choices they make when they go to the shops.

- Energy
 - Growing food and the associated energy costs of buying home grown food or imported food
- Water
 - Use of water to grow plants
- Biodiversity
 - How growing studying local habitats and where pest are found can help local biodiversity
- School grounds
 - How the simple act of hunting for mini-beasts can help build up a picture of the school grounds in preparation for the design and creation of new features in your school grounds
- Healthy living
 - How growing your own produce can promote healthy living by promoting a healthy diet and also promoting exercise in the act of growing that produce. The improvement of school ground can also aid mental well being.
- Transport
 - Reduce transport costs of food by growing your own local produce.
- Litter
 - When carrying out gardening tasks introduce children to tidy habits – pick up all packaging and dispose of ‘thoughtfully’ – see waste
 - When outside be it school, garden or countryside “Take only photos Leave only footprints!”
- Waste
 - Explain that gardening and farming is and always has been synonymous with recycling. Re-use seed trays, compost is made from last years ‘recycled’ plants. Think twice about where to put litter – bin or recycle?
- Global citizenship
 - Explain how even the little things we do – where how food comes from, how much we recycle, our biodiversity, can affect the whole world be it good or bad!

BEYOND THE FARM: SCRIPT**INTRO**

Beyond the farm...

Milk

Potatoes

WATER WATER EVERYWHERE

We hoped to show you work from our wood - but like a lot of other places it is too wet to work in

Water is essential to farming and the countryside - but unfortunately nature does not always match our needs.

After warnings of potential drought last spring when we had over 18 months of below average rainfall it seems to have never stopped raining since

Farmers need water to grow plants and livestock

Livestock farmers need water for their animals to drink

They also need water to keep their housing clean and when milking

This reduces the chances of disease both in the animals and in their products such as meat and milk

Plants need water to grow, farmers often give some crops like potatoes extra water with these irrigation pumps

Water is also need to spray crops and protect them from pests and diseases

Water is also used to process crops ready for you to eat - wash carrots, parsnips, peas...

Too much water can be just as big a problem for farms and the countryside as it is in towns

Livestock farmers must be alert if floods are expected so that their animals do not get caught in the rising water

Too much rain can also damage or drown plants - even a few hours under water can damage plants - like this corn which has turned yellow

Whole fields of crops or grass can be lost if the land is flooded for any length of time

LIVESTOCK - MILK BEYOND THE FARM]

The White Stuff – you saw how it was squeezed from the cow or goat

Over the coming weeks we will see how it gets into: the cartons, butter, yoghurt, cheese

The milk used for these products is specially treated to kill harmful germs and bacteria.

The milk from the dairy animals is first stored in a cooling tank at 6OC

The milk is then heated to 72OC for 15-20 seconds.

This is called pasteurisation

This kills most of the bacteria so it is safe for you to eat or drink.

The pasteurised milk is then put into cartons for you to drink – this is goats milk, cows milk is done just the same

Milk being put in

Labelled to identify the farm milk was produced on

packed by robots

drunk by you

Teachers notes:

The key thing with this process is that it makes the milk safe but does not effect the flavour. If you can get some 'raw' milk you could do a test with your class. You could also have them research the process and who invented it for homework.

For more information on Pasteurisation see - or download to booklet about the process From website.

<http://encyclopedia.farlex.com/Pasturisation>

<http://medical-dictionary.thefreedictionary.com/Pasturisation>

CROPS – POTATOES BEYOND THE FARM

Do you remember watching potatoes being harvested last Autumn. Those not needed straight away where put into special cold stores.

These stored potatoes are being gradually taken out of store to keep shops supplied all year

No need for imports here!

Some are packed into bags for you to buy in shops, or made into potato products like waffles or smiley faces.

Here are some potatoes being packed into 25Kg sacks to send out to shops.

These potatoes are being made into something you may especially enjoy!

Can you guess what?

Teachers notes:

Would just like to debunk a couple of urban myths here – potatoes grown and stored in this country are just as good over winter when brought out of store as 'fresh' imported potatoes. This harks back to the James Doherty program which showed potatoes being grown in the desert using seed imported from Scotland, water from under the desert then Irish peat to pack them in before being sent to UK for sale in shops! The only clever thing about this is the business man who managed to pull this off the phrase 'coals to Newcastle' springs to mind. In my opinion this is wrong on so many levels – perhaps a good debate to have with your class if you show them this video and the James Doherty one! <http://www.discovering-our-countryside.co.uk/inotes/food-miles/>

The other point I would like to make regarding this video is the consumption of potato proudtcs be it mash, crisps or chips – please make the point that they are not 'bad' for you per say as my children came home saying, but if eaten as part of a balanced diet in moderation do no harm whatsoever. A diet of just fruit and veg is not good for you either – it is not balanced!