

Weather – Good or Bad? 4th March 2013

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 4 March 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:

Weather – Good or Bad?

Details of this program

This program looks at the importance of weather how it effects wildlife and the onset of spring, how we can cheat the weather to some extent by growing plants and using bees in a greenhouse, but not without a cost. Also how it can still cause problems with keeping livestock like pigs outside.

- **The snow hath retreated** – Looks at the signs of spring. What can you look for as an indication that spring has sprung! Also how you and your school can get involved with helping scientists analyse if spring is getting earlier like some people believe.
- **Beating the weather?** –Another visit to the greenhouses to see how the tomatoes are progressing, as well as cucumbers and surprisingly strawberries.

- **The weather can kill!** – This follows our newborn piglets through to weaning, looking at what different systems are available for rearing pigs and how the UK pig herd has some of the highest welfare standards in the world – which we should be supporting if we believe in animal welfare..

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; Wildlife and the Countryside

NATIONAL CURRICULUM SUBJECTS LINKS.

Citizenship KS 1 + 2

Details on relevant content here

E.g. Shows how farmers have many choices to make when deciding on which system to choose to rear their animals in.

Relevant QCA Schemes of Work

Unit 3 Animals and Us

Design and Technology KS 1 + 2

Looks at growing crops in greenhouse to extend the growing period and provide fresh 5-a-day produce

Relevant QCA Schemes of Work

Unit 1c Eat More Fruit and Vegetables

Science KS 1 + 2

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

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

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.

Unit 3B. Helping plants grow well.

Unit 4B Habitats.

Unit 5B. Life cycles.

Unit 6A Interdependence and adaptation.

ECO SCHOOL TOPIC LINKS

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.

- Transport

- Healthy Living
- Energy
- Global Perspective
- Sustainability
- Biodiversity

TEACHERS NOTES:

This program has weather as a theme – how it effects wildlife and onset of spring. Also how growers attempt to ‘cheat’ the weather using bees in greenhouses when bees outdoors are still in hibernation, but how keeping livestock can still be effected by weather if farmers choose to keep them outside rather than inside. It also looks at how the UK as some if not the highest welfare standards in the world – but still allows meat and animal products to be sold in the shops from countries with much lower standards – even from within the European Union. ?

NEW SPRING – NEW LIFE: SCRIPT**INTRO**

Some of the first signs of spring are catkins. They come early as their pollen is carried by the wind so they don't rely on insects like bees which are still in hibernation

SIGNS OF SPRING

Wind blows the pollen from the male parts of plants.

Some of this pollen will hopefully land on the female parts of the plant

This allows pollination and then fertilisation to take part

If this does not happen then there will be no ‘fruits’ from these plants later in the year. So it will be interesting to see if there are any hazel nuts later in the year – like these from last year!

Other signs to look out for this spring are

Plants flowering such as: snowdrops, anemone, celandine, crocus, shots of other plants appearing such as bluebells and daffodils.

These plants often grow in woods, so they have to grow and flower early before the trees get their leaves and shade these plants out.

Other signs of spring are

Some people believe that our climate is changing and spring is getting earlier – this seems to go against the very cold weather we have just had in February. Your school could get involved with helping scientists monitor when spring starts each year by recording when some of the events we have shown happen each year – see website for details

BEATING THE WEATHER

The tomatoes have grown quite a bit since last time

This man is twisting the strings round the stem to give the plant some support

He is also removing some of the side shots which will not produce any fruit

The tomatoes we have been watching grow are now almost flowering – they need insects like bees to pollinate them so that they produce fruit - tomatoes

The greenhouse is kept at a constant 18C so bees can be used even in very cold winter weather. This grower has now got some bees in his greenhouse. They are being got used to their new home and will soon start their very important work of pollinating the tomato plants

Keeping a greenhouse at a temp of 18C in cold weather is very expensive in energy costs – 1Ha of greenhouse (about 2 football fields) costs about £1000 per week. So the grower is putting insulation up in this greenhouse in preparation for it being filled with tomatoes also. This insulation will save him up to 30% of the energy costs of this greenhouse each week – can you work out how much money that will be?

Cucumber are another plant grown in greenhouses – these are just being planted.

These plants are just 30 days old. 35,000 cucumbers will be planted in this 1 greenhouse. We will follow these cucumbers over the coming weeks.

Another plant you might not expect to find in a greenhouse is strawberries.

Strawberries are grown in greenhouses so that they can be enjoyed fresh over a longer period

Strawberry plants do not have to be grown from fresh each year.

These are last years plants which are being prepared for this years fruiting by pulling down the old leaves and growth to allow light in to encourage the new leaves to grow which is where this years crop will grow from.

Again we will follow these strawberry plants over the coming weeks

THE WEATHER CAN KILL

The piglets we saw being born are now old enough to look after themselves about 4 weeks old, and have been weaned from their mother

The piglets are put in these special pig houses some on slats and some on straw

Both slats and straw systems have their advantages – slats means the piglets are always clean and dry. Whilst straw based systems are cheaper to set up....

The weaned piglets are feed a special balanced diet – just like you need

The piglets born outside will also soon be weaned – again this outdoor system has it's advantages and disadvantages. It is again cheaper to set up and is lovely in summer, but the cold weather we have just had can be life threatening for piglets....

After being weaned the sows are then mated again with the boar pig ready to have another litter of pigs

Sows will produce 2 litters a year, this is important as it makes sure we have enough food and that the farmer has some chance of making money from keeping pigs.

However making money is not guaranteed especially when people buy pork and bacon from countries which don't keep pigs in as high welfare standards as the UK and so can sell meat at a cheaper price in the shops.

To make sure your food comes from the UK look for the Red Tractor Logo and Union Jack on the packet