

# Introduction

Think about it. How often do you connect to a farm? Answer: at least three times a day. Everytime we eat a meal, or have a snack, we are relying on a farm because just about everything we eat is reared or grown by farmers. Farming is the foundation of civilisation but most people know very little about where their food comes from or how it is grown.

This guidebook aims to tell you about farming in general – and organic farming in particular. Organic farmers aim to use methods which place strong emphasis on protecting the environment. They also have to ensure that their animals can range freely outdoors and have plenty of space. We learn how organic farms are helping to enhance wildlife and conserve our countryside. This book takes us on a journey of discovery – enjoy!



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# Farming



**DID YOU KNOW?**

Over the last 50 years our countryside has lost:

- 95 per cent of wildflower meadows
- 82 per cent of partridges
- 75 per cent of skylarks (60 per cent lost since 1972)
- 50 per cent of natural woodland
- 40 per cent of hedgerows.

However, research has shown that compared to non-organic farms, organic farms have:

- 44 per cent more birds in fields
- 25 per cent more birds at field margins
- More than five times as many wild plants in arable fields
- 1.6 times as many insects.

Throughout history farming has shaped the land. For instance Iron Age farmers changed the landscape from forest to a farmed countryside. Over the last 50 years, there has been another dramatic change. Industrial-type farming has tended to produce a single commodity (like wheat or sheep) and use chemicals to feed the crop and kill pests and weeds. This has had a damaging effect on the countryside.

**Organic farming and organic standards**

Organic farmers aim to farm with the least ecological damage, to conserve and enhance wildlife and land. Many non-organic farmers also have a similar approach – but organic farming is enforced by strict rules. These are called organic standards. Organic standards are laid down in law. Anything labelled 'organic' must legally meet the required standard, and all organic farms must register with a certifying body, such as the Soil Association, which is the oldest organic certifier in the UK. A Soil Association inspector will visit a farm at least once a year to check that the standards are being followed and only then will the Soil Association organic symbol be awarded. Look out for the Soil Association's symbol on organic food. It is your guarantee that food has been produced to the highest organic standard.

**FARM DETECTIVE**

Pretend you are a detective, or a Soil Association inspector, who is looking for clues about how the organic farm works. This guidebook will help you; for example, can you find:

- Some clover
- Wildlife habitats
- Something that smells nice
- Mini-beasts
- Different tree species.

**WHAT DOES IT MEAN?**

**Arable fields** – fields cultivated to grow crops like cereals.

**Field margins** – edges of the field by hedges or stone walls.

**DID YOU KNOW?**

One centimetre of soil takes between 100 and 1,000 years to form. One teaspoon of healthy soil contains one billion organisms with thousands of different species.

## Soil

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Soil is essential to life. Healthy soil has food, air and water to help plants grow. In turn animals feed on the crops and humans feed on both plants and animals. The Soil Association believes that our health depends on healthy soil.

A living soil is teeming with life, from earthworms, centipedes and beetles to fungi and bacteria, bugs so tiny you need a microscope to see them. Soil forms slowly but can be lost rapidly through erosion. It can also be contaminated by pollution.



## ORGANIC FARMING PROTECTS AND IMPROVES SOIL BY:

.....

- Restricting artificial chemicals because they suppress soil life
- Adding nutrients through composted farm manure and green waste
- Establishing crop rotation because different crops put in or take out different nutrients and it is important to balance crop growing and building soil fertility
- Encouraging hedgerows, windbreaks and smaller fields to reduce wind erosion.
- Planting cover crops to protect soil from wind, rain and nutrient loss.





## WHAT DOES IT MEAN?

**Ley** – when land is sown with grass then ploughed up, as part of a rotation. Leys allow the land to rest and rebuild fertility.

**Monoculture** – growing the same crop on the same field year after year.

**Pesticides** – poisonous chemicals used to kill pests. Pesticides also include herbicides (which kill weeds), fungicides and insecticides. 'Cide' comes from the Latin *caedere* meaning to kill.

**Fertiliser** – applied to crops to improve growth and yield. Can be artificial chemicals or natural products (for example manure).

## Crop Rotations

Rotations have formed the traditional base for agriculture since Roman times and developed during the 18th century. Rotation is at the heart of organic farming. A rotation of crops around the farm over a number of years will aim to balance crops which build fertility with those that demand nutrients. So a year of potatoes is followed by a year of clover. Livestock are also rotated around organic farms to provide 'clean grazing' and to prevent the build up of parasites or diseases.

### Clover leys

Clover leys form the foundation of any organic farm. Clover has nodules on its roots that 'fix' nitrogen into the soil, providing the nutrition that enable crops to flourish.



## A SIX YEAR ROTATION



Year 1 – cattle

Year 2 – sheep



Year 3 – wheat

Year 4 – beans



Year 5 – oats

Year 6 – turnips

## DID YOU KNOW?

Rotation fulfils the following important roles:

- Provides nutrition for crops through clover leys and composted farm manure
- Controls weeds, pests and disease problems
- Maintains the soil organic matter and structure.

**WHAT DOES IT MEAN?**

**Germination** – when a seed starts to grow by sprouting roots and shoots.

**Mulching** – when material like straw or plastic sheeting is applied to the soil surface to protect the plant.

**Microclimate** – climate of a small area that is different from that of the surrounding area.

**DID YOU KNOW?**

Non-organic farmers can use over 450 pesticides without any restriction. Organic farmers cannot use pesticides – except as a last resort. Even then they only allowed six different types. One of these six pesticides is currently under review by the Soil Association - which is always looking at ways to improve its organic standards..

## Weed & pest control

Weeds are unwanted plants that can harm the crops being grown. They compete for space, light, water and nutrients and can reduce the value of the final crop. Organic farmers do not use any herbicides and therefore rely on other methods to manage weeds. These are:

1. Crop rotation
2. Timely cultivations before or after sowing can stop germination of weeds – by working the ground, the seedling is exposed to the sun and dries out
3. Hand weeding or mulching is sometimes used on high value crops
4. Choice of varieties helps with control as some varieties are better at competing with weeds.

### Pest control

Organic farmers believe that healthy plants tend to be more resistant to insect attack. As organic plants grow more slowly, they also have thicker cell walls providing a greater natural barrier to pests. A balanced food chain will have a variety of predators that feed on crop pests. Organic farmers encourage birds, bats and beetles by creating suitable habitats for them.



## MAKE FRIENDS WITH MINI-BEASTS

See what little creatures or mini-beasts you can find living on the farm:

1. Look under stones and dead wood
2. Shake branches to see what falls off onto a piece of white paper
3. Dig some pitfall traps using yoghurt pots
4. Look carefully on plants or on the ground. Do different types of mini-beast prefer a different habitat?

# Livestock







## ANIMAL FARM

Firstly, look at a farm animal and ask:

'How many legs has it got? How many eyes, toes, ears etc? Does the animal have fur or feathers? Can it see? How many features are the same as ours?'

Secondly, sit in a circle and ask each member of the group to pretend to be a farm animal. Then ask: 'do you have: fur/two toes/ four legs/a tail/etc.' If the answer is yes, then the person has to run round the circle and back to their place again.

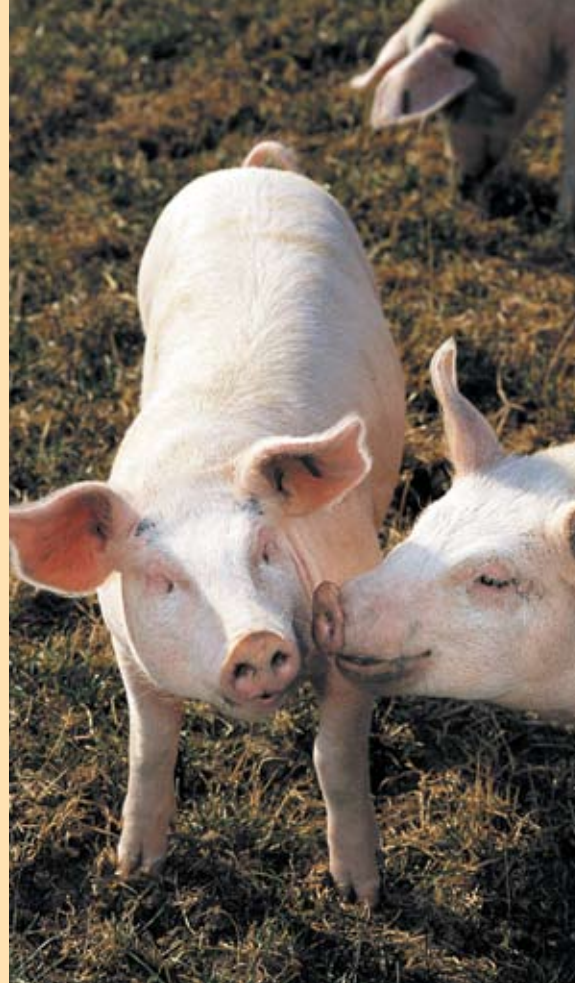
When you have lots in common (for example two eyes) everyone will get up and run round.

## Healthy animals

Organic standards prioritise animal welfare. Unlike the term free-range, organic standards are laid down in law so they guarantee that animals are well treated.

### Organic farm animals

- ✓ Must have access to fields (when conditions permit) and are truly free range
- ✓ Must have plenty of space (when housed) which helps to reduce stress and disease
- ✓ Must be fed a diet free of genetically modified organisms (GMOs)
- ✓ Must only be given medicine when the situation demands, and not routinely



## WHAT DOES IT MEAN?

### Genetically modified/ genetic modification/GM

– the insertion of a gene from an animal or plant into the genetic material of another animal or plant. Genetically modified organisms are banned under organic standards. There are concerns about the unknown and long-term effects of GM on our health and the environment.

## LOOK FOR DAIRY BREEDS ON THE FARM



Friesian/Holstein cow



Ayrshire cow



Guernsey cow

## Cattle

Cattle breeds have developed over centuries from wild cattle that used to roam Asia and Europe. Humans have bred these domesticated cattle selectively for beef production, dairying or 'dual purpose' (milk and meat).

### Dairy cattle

A typical dairy cow has a thin, wedge-shaped body with little flesh and prominent bones. The cow produces milk after giving birth to a calf. Organic cows are usually milked no more than twice a day. Cows fed on concentrated feed may produce more milk but it can be stressful for a cow to produce so much milk. Therefore organic cows are fed a grass-based diet, producing a slightly lower but more natural yield.

### Beef cattle

A typical beef animal is reared to be eaten: it has a solid, rounded body, well covered in flesh. A range of breeds are commonly used by organic farms, and native breeds are suited to particular parts of the country. It is important to preserve the bloodlines of rare breeds as some are in danger of being lost forever.



## LOOK FOR BEEF BREEDS ON THE FARM



Aberdeen Angus bull



Hereford bull



Welsh black bull

**WHAT DOES IT MEAN?**

**Ewe** – female sheep.

**Ram** – male sheep.

**Clean grazing** – pasture that has not been grazed by the same species of livestock that season.

## Sheep

Sheep have been reared for thousands of years for their meat and wool. Ideally, an organic flock grazes in a rotation with cattle. Rotational grazing means that the farmer will move the sheep on to 'clean grazing' to help prevent the build up of internal parasites and disease, especially important after lambing.

### Upland sheep

Sheep breeds are broadly divided into upland and lowland breeds. Upland breeds are extremely hardy, defying snow and gales and grazing on the meagre grasses. Mountain sheep are territorial and get to know their own part of the mountain (hefting). Upland lambs will usually be fattened in the lowlands. Although the carcass is small, mountain lamb is renowned for its flavour and texture.

### Lowland sheep

Lowland ewes are mated with a downland ram to produce lambs that will grow fast. If fed well (or flushed) prior to mating, a lowland ewe will produce mainly twins. Lambing takes place in the spring, usually between March and April.



## NAME THE SHEEP



Mountain – Welsh mountain



Upland – Masham



Lowland – Suffolk  
Lley



## NAME THE PIG



Gloucester old spot



Saddleback



Tamworth

## Pigs

The pigs of ancient Britain lived mainly in woodlands and provided meat for the Celts, Romans, Saxons and Normans. By Tudor times, a large number of pigs were being kept in sties, and turned out into woods to forage. Improved breeds arrived in the late eighteenth century, and up until the mid-twentieth century most country people would have kept a couple of pigs by the house, one for themselves and the other to sell. The second half of the twentieth century saw the introduction of intensive pig farming where pigs were kept indoors, often in cramped and restrictive conditions.

### Organic pigs

Organic pigs are kept in conditions that, as far as possible, allow them to express their natural behaviour. This includes being kept in family groups with free range access in the grazing season. Strawed winter housing is permitted in severe weather conditions. Native breeds of sow (such as the Saddleback) are generally more suited to the extensive organic production system. Sows will often have a litter of around 10 piglets and can have two litters per year.



## DID YOU KNOW?

Animal welfare in organic pig production is paramount and certain practices are prohibited such as nose ringing and use of farrowing crates (when the sow giving birth is kept in a crate which both restricts her movement - and her maternal instincts)

As herbicides are not permitted on organic farms, pigs can be very effective at controlling persistent weeds through their foraging and rooting.



## Native breeds

Native breeds of sow (such as the saddleback) are generally more suited to the extensive organic production system. However, many farmers use a leaner boar, such as the Duroc to reduce fat in the finished carcass. Sows will often have a litter of around 10 piglets and can have two litters a year. Other familiar breeds include the Tamworth (which resembles the ancestral wild pig), Oxford and sandy black (pictured) and the Gloucester old spot.



## MAKE AN APPLE PIG

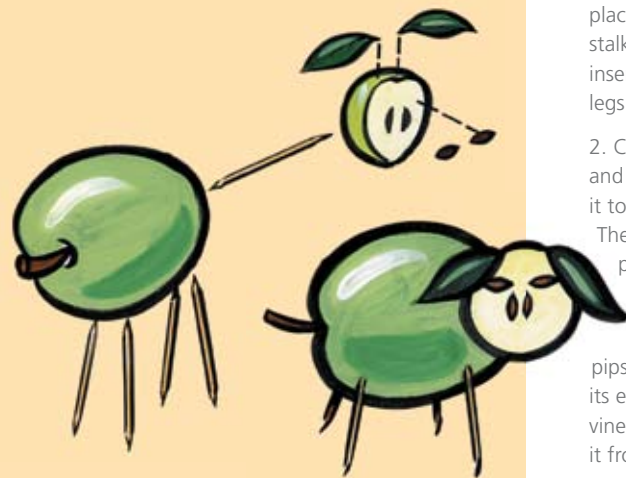
The Gloucester Old Spot pig used to be known as the 'orchard pig' as it used to graze on windfall apples in the Severn valley. You can make an apple pig with a large apple, a small apple and four cocktail sticks.

1. Take the large apple and place it on its side so that the stalk forms the pig's tail and insert four sticks underneath as legs.

2. Cut the small apple in half and use another stick to attach it to the front of the pig's body.

The cut side of the apple is the pig's face and the pips form its nostrils.

3. You can use other pips for its eyes and leaves for its ears. If you dip the face in vinegar or lemon, it will prevent it from turning brown.



## NAME THE POULTRY



Rhode  
Island red



Black rock



Bronze turkey

## Poultry

### Chicken

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Chicken are believed to have descended from the jungle fowl in Asian tropical forests. Domestic chicken were kept in China up to 4000 years ago but reached Britain at around AD100. Poultry can be divided into laying or table birds.

### Laying birds

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Laying birds are kept for egg production and lay mostly in the spring and summer. Breeds include Rhode Island Red, Black Rock and Columbian Blacktail.

### Table birds

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Table birds are kept for meat production and are larger and meatier than the layers. Current commercial birds are hybrids based on traditional breeds such as the Sussex and Rhode Island Red.

### Turkeys

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Turkeys are descended from the North American wild turkey which favours a forest habitat. They are usually raised for the Christmas market and many organic farms will rear a flock during the second half of the year. Breeds include Bronze and Norfolk Black.



## DID YOU KNOW?

Industrial-type battery farms may keep hens in a cage where the floorspace is roughly equivalent to a sheet of A4 paper. This is not allowed under organic standards.





### Organic poultry

Unlike industrial style battery farms and broiler enterprises, Soil Association organic poultry are truly free range:

- ✓ Soil Association's organic standards insist on high animal welfare standards and practices such as routine beak clipping are prohibited
- ✓ Flock sizes are limited to 2000 per chicken house and they are kept in conditions that allow them to express their natural behaviour.
- ✓ Hens have continuous access to organic land covered with vegetation and are rotated regularly to prevent the build-up of disease.
- ✓ Breeds are selected to be hardy, disease resistant, and docile.
- ✓ Free range birds need protection from predators. Electric fences are often used to keep out foxes and trees or covered shelters provide additional shade and security.



### CHICKEN RUN

Animals need food, water, shelter and space to move – just like human beings.

Rope off a pen about 2m by 2m. Pretend that you are chickens in the pen. It is a little bit squashed and you can think about why it isn't very nice (can't scratch, can't flap your wings, can't run etc). Then you are then let out to run around and to become free range organic chickens. If you were a farm animal, how would you prefer to live?

# Crops





## FLOWER POWER

Mark a small area with a hoop or pegs and string. Look at the number of colours in the area and count the different species of wildflower and grasses. Can you identify any of them?



### DID YOU KNOW?

That one season of clover growth naturally fixes as much nitrogen as 200 kg per hectare of artificial fertilisers?

## Crops

### Grass

Grass fields are used for grazing and producing winter feed (eg hay and silage) for livestock. Organic farmers plant clover with the grass to build soil fertility, instead of using artificial fertilisers. Cut grass is used for making silage or hay for winter feed.

Permanent pasture meadows are never ploughed and therefore tend to have a greater variety of grasses and flowers. Grass/clover leys are grown for two to four years and will form the basis for animal grazing and winter feed. A typical mixed organic farm will have between 30 and 50% of the area dedicated to grass/clover leys at any particular time.

Haymaking is the traditional method of producing winter feed for livestock. The grass is cut, turned regularly to help it dry and then baled ready for storage in a barn. Today, most grass is made into silage where the grass is cut and wilted in rows before being packed tightly in a plastic-lined silage clamp to remove the oxygen. This airtight store preserves the grass for winter feed, 'pickled' in its own juices. Many farms use big-bale silage wrapped in plastic and stacked on the farm.



## NAME THAT GRASS



Red clover



Timothy



Cocksfoot



White clover



Ryegrass

## WHAT DOES IT MEAN?

**Nitrogen** – essential to life, forming about 78 per cent of the air we breathe, and vital for plant growth. Factory produced nitrogen is applied as a fertiliser by non-organic farmers but this can cause environmental damage. The manufacturing process not only uses a lot of oil but also artificial nitrogen is easily washed away causing pollution in rivers and streams. Organic farmers use clover to add nitrogen to the soil.

**Hay** – sun dried grass.

**Straw** – stalks from cereal.

**Silage** – pickled, or fermented, grass.

**Sward** – carpet of grasses and clovers covering the ground.



## Clover

Organic farmers grow both red and white clover because of their amazing ability to draw nitrogen from the atmosphere into the soil. It is the bacteria living in their root nodules which 'fix' the nitrogen, using energy supplied by the plant. White clover tends to be used in grazing fields and long-term pasture. High in protein, red clover is too rich to graze so it is used cut for winter feed. Fast growing, it shades and restricts the growth of weeds

## DID YOU KNOW?

That one season of clover growth naturally fixes as much nitrogen as 200 kg per hectare of artificial fertilisers?

## NAME THAT FORAGE CROP

Beans



Peas



Stubble turnips



## Forage crops

Although grass/clover leys will provide the majority of animal feed required, short-term forage crops like swedes or kale can feed livestock early or late in the season. Forage is consumed in its green state, particularly by cattle and horses. When a forage crop is grown between two main crops in a rotation, it is called a 'catch crop'.

### Pulses

Peas and field beans are the most common pulses grown in the UK. They provide both a useful break crop between cereals. Like clover, they are legumes and so have the added benefit of fixing nitrogen in the soil.

## WHAT DOES IT MEAN?

**Clamp** – traditional form of storage in which root vegetables are neatly piled and covered with straw and earth.

**Catch crop** – cheaper to grow than clover, this extra crop is grown between crops to hold soil together and build fertility (nutrients stored in its leaves are ploughed back into the soil)

**Break crop** – a change of crop in a rotation. A break crop (like field beans) may be planted between two cereal crops (like wheat and oats). This helps disrupt weeds, pest and disease cycles that could otherwise harm the cereal crop.





## NAME THE CEREAL



## WHAT DOES IT MEAN?

**Malting** – barley is soaked in water and allowed to partly germinate, then dried. The roots and shoots are removed and the remaining grain (malt) is then steeped in water. This solution is used in brewing, while the residual grain is used for animal feed.

**Spelt** – ancient wheat variety which has less gluten and so can be tolerated by people with a wheat allergy.

## Cereals

Winter cereals are sown in the autumn and spring cereals are sown in the spring. Harvest time is between July and October and depends on the crop, weather and location. Hot dry weather is needed during harvest because moist grain will spoil in storage.

Organic cereals, fertilised by clover leys, take up nutrients slowly. Their cell walls are thicker, making the crop more resistant to pests and diseases. Tall-strawed varieties help shade out and restrict weeds; remaining weeds provide useful habitats for predators that feed on crop pests like ladybirds.

### Wheat

Wheat is suited to heavy clay soil and most is grown in eastern England, where there is more sun and less rain. In Wales, it is grown in lowland areas near the coast. Wheat is nutrient-demanding so it will be the first crop that follows grass and clover in the rotation. It is used for a range of products including bread making, biscuits and animal feed.

### Barley

Barley has distinctive whiskers or 'awns' on its seed head. As it ripens, the ear bends over until the awns face the ground. Organic farmers usually grow barley for animal feed and for malting. In Wales it is grown more widely than wheat.

### Oats

Oats can be grown on a wide range of soils and are suited to a cool wet climate, so do well in Wales and Scotland. Oats are grown for animal feed and human consumption, especially for porridge oats and muesli.

### Rye and triticale

Rye is fast growing and provides a good crop for spring grazing by sheep and cattle. Rye bread is still made and the flour is often used as a filler in sauces and soups. Triticale is a cross between wheat and rye and is used for animal feed.

## WHAT IS IT MADE OF?

Match the following to the cereal they're made from.



Beer



Bread



Porridge



## FRUIT OR ROOT?

Different parts of plants provide us with food. Parts such as the **stem**, **root**, **leaf**, **flower**, **fruit** and **seed**.

Can you match the food below to their correct parts?



Cabbage



Cauliflower



Carrot



Oats



Pear



Rhubarb

Cabbage = Leaf Cauliflower = Flower  
Carrot = Root Oats = Seed  
Pear = Fruit Rhubarb = Stem

## Horticulture

The growing of vegetable crops is called 'horticulture' and it is often seen as separate to farming or 'agriculture'. Horticultural crops can be grown on a field scale, or on smaller beds within a walled garden, greenhouse or polytunnel.

The same principles of crop rotation, weed and pest control apply. An example six year horticultural rotation could be:

1. clover
2. potatoes
3. legumes
4. brassicas
5. roots
6. salads

### Field scale vegetables

Potatoes are the main organic root crop grown in the UK. Staple vegetables such as carrots, cabbages and cauliflowers are also grown on a field scale.



## WHAT DOES IT MEAN?

**Green manure** – when ploughed back into the land, it feeds the soil (used instead of compost or manure).

### Walled gardens

Walled gardens were built to provide a protective environment for vegetables and fruit. The walls help keep rabbits, livestock and people out, providing a sheltered microclimate with a mix of sun and shade to suit a wide range of plants.

### Glasshouse crops

Glasshouses and polytunnels have the benefit of extending the growing season, widening the variety of crops grown, and providing some protection against pests and diseases. Tomatoes and winter salads are often grown in them.

### Vineyards

The Romans introduced the vine to the UK and vineyards were thriving in Wales and England by Tudor times. However, the number declined and commercial vineyards had ceased production by 1914. Over the last 30 years a revival has begun and UK organic wine is now available.

### Top fruit

Apples, pears, plums and cherries are called top fruit and are usually grown in orchards. Traditional orchards have declined dramatically since World War II, although Wales still has some organic orchards, especially along the border with England. Many local and distinctive varieties of fruit are preserved in special collections.

Organic fruit is now widely available although much of the produce is imported. Orchards require a three year conversion period before the fruit can be sold as organic. Traditional, widely spaced orchard trees are often suited to organic production, especially where a mixture of different varieties help to minimise the impact of pests and disease.

## NAME THAT APPLE

There are over 2,300 apple varieties in the UK – but today only a few are available in the shops.



Tom Putt



Worcester  
pearmain



Golden noble

# Nature





## MEET A TREE

Find an area containing a number of trees and split up into pairs. One of the pair either shuts their eyes or wears a blindfold. The other has to lead the blindfolded one to a tree and ask them to get to know it through touch and smell (feeling the texture of its bark, the size of its trunk, smell of the wood etc). Then they are led away, the blindfold is taken off....and they have to find it again!



## Woodland

During medieval times woodlands provided timber as well as a huge range of non-timber products, from forest fruits to fuel to grazing for livestock. Oak bark was exported from Wales to Ireland for tanning (making leather) and charcoal was used in smelting iron and lead. Woodlands were also managed for hunting deer.

Over the centuries, there has been a steady decline in woodland to just five per cent of the UK's land area at the start of the twentieth century. The woods which remain are often because the soil was unsuitable for farming. They are also used for sheltering livestock in the winter.



## HOW OLD IS THIS FOREST?

These springtime flowers are indicators of an ancient woodland as they take a very long time to become established so look out for:



Bluebell

Ramsons  
(wild garlic)

Wood anemone



## NAME THAT LEAF

Oak



Ash



Beech



Field maple



Scots pine



## Woodland Management

Growing concern for the environment and the need for more home-grown timber has resulted in a new interest in the management of woodland. As a result the total area of forest cover is on the increase.

Demand is growing for timber from sustainable sources and Forest Stewardship Council (FSC) and organic woodland standards help to ensure that management matches high environmental criteria. Organic standards promote selective felling of trees because a mix of age and species is good for wildlife. Clear felling, an intensive practice which fells all trees in one plot, is more damaging to the landscape. Organic standards also encourage new trees to be grown from seed rather than transplanting trees from another place.



## LEAF RUBBING

Take a piece of paper and crayon and make a rubbing of leaves to compare the different shapes.



## NAME THAT CREATURE



Water boatman



Great diving beetle



Pond snail

## Water features

Many farms will have water features, from rivers and ponds to saltmarsh and coastline. We all depend on water and care must be taken to avoid depleting this essential resource through contamination. Farm waste and run-off can cause serious pollution, especially through pesticides, nitrates and manures being washed into water courses.

Organic farms seek to minimise pollution by severely restricting the use of artificial fertilisers. Composting also helps by making farm manures more stable and less likely to leach into water courses. Wetland areas can also be very important and organic standards prohibit the drainage and over-stocking of these habitats.

### Rivers and streams

The banks and margins of rivers and streams are important for wildlife. Organic standards require adequate borders so that crops are not planted too close to the riverbank. This prevents erosion and soil run-off.





## WHAT'S IN THE POND?

What creatures are living in the pond, stream – or even a water trough? You need a pond dipping net and an empty pot. Slowly sweep the net through the water and empty the contents into the pot. Can you see any of the creatures shown on page 82? Replace them carefully in the water afterwards.



## Ponds

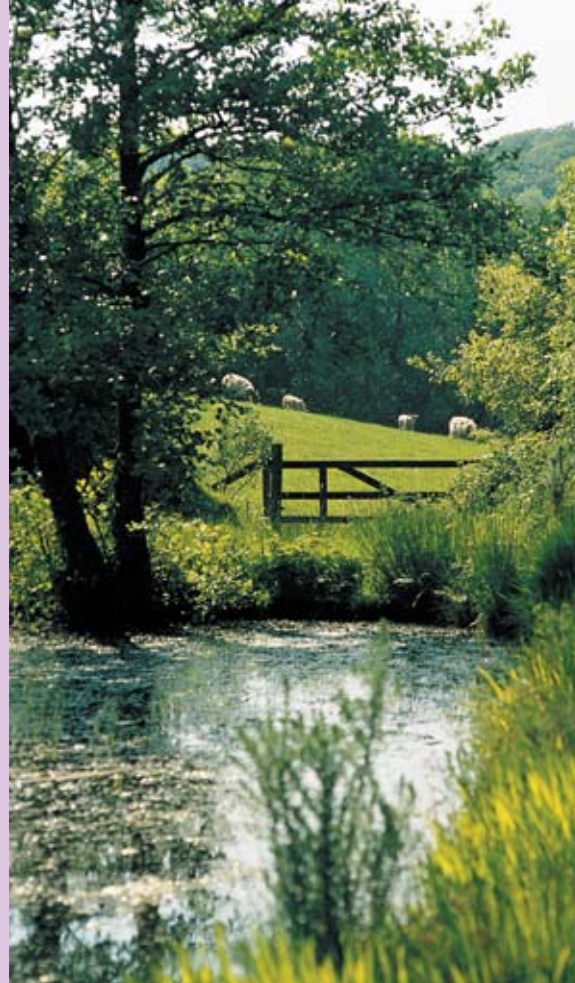
Ponds have clearly defined margins and are one of the easiest habitats to observe and understand. They are crammed with plants and animals, from masses of microscopic algae to roaming carnivorous fish.

## REMEMBER

Only go near the water with an adult, even if the water looks shallow.

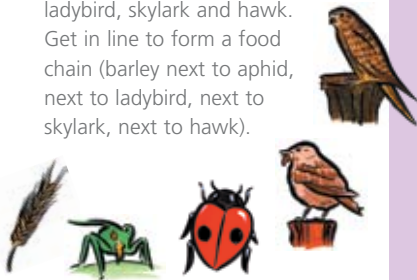
## DID YOU KNOW?

That you can farm fish? There are organic standards for fish farming (aquaculture). These aim to produce quality fish whilst protecting the welfare of the fish and the environment.



## FOOD CHAIN GAME

Make five cards with one picture on each: barley, aphid, ladybird, skylark and hawk. Get in line to form a food chain (barley next to aphid, next to ladybird, next to skylark, next to hawk).



Someone pretends to be a farmer and sprays chemicals to kill the aphid. The aphid card leaves the line.

Without the aphid, the ladybird has nothing to eat and so leaves the line too. This affects the skylark, and so on, demonstrating that all living things are connected.

## Wildlife

### Wildlife and organic farming

Organic farming help provide habitats for wildlife. Birds, bats and beetles make their homes on the edge of fields (field margins), in hedgerows and trees. On an organic farm, the fields growing crops can also provide homes for wildlife too. This is because of the restricted use of chemicals, allowing more wildlife to survive.

### Food chains

Organic farms encourage a balanced 'food chain' to help support the farming system. A food chain starts with the soil which enables plants to grow. These plants in turn feed herbivores (eg insects) which in turn are eaten by carnivores (eg song birds). All these inter-connections form the 'food web'. A good indicator of a balanced food web will be the number of carnivores (e.g. birds of prey) in the area. As they are at the 'top' of a food chain, it shows that there is plentiful life 'below' them.

## WHAT DOES IT MEAN?

**Food chain** – who eats who, from the insect which nibbles on a leaf to the bird which eats the insect.

**Food web** – different food chains are part of a bigger system called the food web – which includes the multiple connections between all parts of life.





# Farm visits



## Farm open days and events

Throughout the year, many farms run special open days and farm walks. Whatever its particular focus, the day will provide an excellent opportunity to talk to the farmer and see at first hand what is special about the farm. Many of the farms will put on special tractor and trailer tours, displays and even stalls of local crafts and produce.

To find out more about these events, join the Soil Association and keep an eye on the events calendar. If you wish to have an up to date list, please contact us at the address at the back of this brochure.

### Arranging your visit

Check for opening times as although some farms are open all the time, others are only open to groups by arrangement. These farms will usually have a trail which you can walk to find out more about the farm, or you may be able to join a special open day. Some farmers may charge a small fee for guided tours to account for their time spent away from their work to show you around.

## COUNTRY CODE

Ensure you take appropriate footwear and waterproofs to avoid a soaking in wet weather. Remember to follow the country code, the farm is both home and livelihood for the farmer so please treat it with respect:

- ✓ Take your litter home with you
- ✓ Leave gates as you find them
- ✓ Do not disturb livestock or wildlife
- ✓ Keep to marked paths.

Dogs may not be allowed on some farms to avoid disturbance to wildlife or farm animals. Take note of the health and safety guidelines contained in the back of this guide.



## SAFETY

As on any other visit, safety considerations should be paramount. The combination of a farm and children pose particular considerations as far as health and safety is concerned.

Be sure to familiarise yourself with the summary of the Health and Safety Executive's advice and get a copy for yourself and other adults on the trip.

Pay particular attention to hand washing and make sure children do so as often as possible, especially after being in touch with farm animals.

Check that the school's insurance covers farm visits and that any requirements on pupil-teacher ratios and supervision can be met.

## School visits

A visit to an organic farm is a valuable way of enriching your students' experience and can be used as a resource to meet targets in almost all areas of the National Curriculum. Organic farms are particularly suitable as most will have a mixture of crops and livestock. This diversity makes them rich in features which provide a satisfying and fulfilling experience for pupils and teachers alike.

Farms are usually very exciting and motivating places for children. Careful research and preparation is important to get the most out of what is available. The potential list of topics that can be tackled on the farm is wide, so it is important to be clear about what the visit aims to do and how this relates to other work children are doing on the National Curriculum.





## Some guidance for teachers

1. First locate your local farm and see whether it is suitable for what you have in mind.
2. Speak with the farmer on the telephone to discuss your requirements.
3. Visit the farm ahead of your class visit to look over the farm and discuss the itinerary with the farmer or education officer. This will be an opportunity for you to find out about the farm, and for the farmer to find out about the school and your students.
4. Find out what resources and materials are available and discuss with the farmer what previous groups have done.
5. Check out the Soil Association's website ([www.soilassociation.org/education](http://www.soilassociation.org/education)) for ideas for you to do both on the farm and in the classroom.
6. Following your initial visit, send a letter to the farmer confirming date, arrival time, and the number of children, teachers and parents arriving. You may need to send a purchase order so that the farm can send an invoice if they charge for the visit.
7. Ask your students to write thank you letters to the farmer after the visit



## DISCIPLINE

A clear understanding between farmer, teacher and children regarding discipline needs to be established before any visits take place. You will need to take the lead on this as most farmers will not be experienced at looking after groups of children.