Nurturing Nature – Farming Our Food

With learning opportunities for food chains, pollination, plant life cycles, habitats, environment, classification and adaptation.

Organised by the Suffolk Agricultural Association

SUFFOLK AGRICULTURAL ASSOCIATION
FOUNDED 1831

FELIX COBBOLD TRUST

INTRODUCTION

The Suffolk Agricultural Association (SAA) are delighted to invite KS2 pupils to take part in our exciting 2024 'Suffolk Farming School of the Year' competition. Whether from an urban or rural school, your class has the opportunity to excel in this fun, hands-on learning competition. The 2024 competition will be focusing on nurturing nature to farm our food.

FIRST ROUND

Design and build a model showing a cross-section of healthy soil. You can display the different soil layers, creatures found in the soil and foods grown underground. We would also like you to submit a summary of up to 200 words - 'Soil is important to farming because.....' which will help judges to understand the thought process behind your model.

The model must be made from recyclable packaging and be no larger than 70cm x 70cm x 70cm. The models will be judged by farmers and the top five schools will go forward to the semi-final which will take place on Friday 10 May at Trinity Park.

SEMI-FINAL

At the semi-final, children will experience a day of interactive workshops including cookery, art, meeting farmers and investigating how looking after our soil plays an active part in food production.

Pupils will be assessed on their knowledge, team work and enthusiasm, with the top three schools going through to the final.

A grant will be given towards transport costs.

FINAL

The final of this prestigious competition takes place at the Suffolk Show (the show is part of our local heritage and this competition is a fantastic opportunity for local schools to be recognised across Suffolk for participating).

Five pupils from each school will be asked to perform an eight minute presentation. Pupils are free to present using drama, song, dance, art and / or poetry and the winning school will be announced at the Suffolk Show. The finalist pupils will receive complimentary admission tickets for two adults (under 15's go free).

Press publicity will be gained for the winning school, along with a trophy and certificate. Runner up schools also receive certificates.

Agriculture dovetails into many areas of the National Curriculum and the Suffolk Farming School of the Year focuses on a different farming topic each year. The topic links to the Farm Discovery Zone area at the Suffolk Show: an interactive educational area for all ages and where the final of the competition will take place. See the Resource Pack on pages 5-11 of this brochure for guidance and ideas for your model.

IMPORTANT INFORMATION...

The Suffolk Agricultural Association (organisers of the Suffolk Show and the School Farm and Country Fair) is a registered charity that promotes agriculture and rural related industries. The Suffolk Farming School of the Year was launched in 2013 in conjunction with 'Cook with me Kids', a not for profit organisation, working with schools and groups to help teach children the importance of real food provenance.

DATES FOR YOUR DIARY:

15 December 2023:

All school entry forms must be submitted.
The entry form can be found on page 13 of this brochure.

w/c 25 March 2024:

All finished models must be labelled and ready for collection.

10 May 2024:

If selected, your class must be available to attend the semi-final workshop day at Trinity Park.

29 May 2024:

The final three schools will be required to send five pupils to the Suffolk Show (during half term week).

SEND Information for schools:

Schools listed as SEND will enter their own class in the first round and all SEND schools will have their models judged together to ensure that a minimum of one school from this group will be chosen to go through to the semi-final, where they will compete against all schools.

The organisers will endeavour to ensure that any additional support needs are addressed for the workshop day and final.

Resource Pages

Nurturing Nature – Farming our Food

SUFFOLK FARMING SCHOOL OF THE YEAR COMPETITION 2024

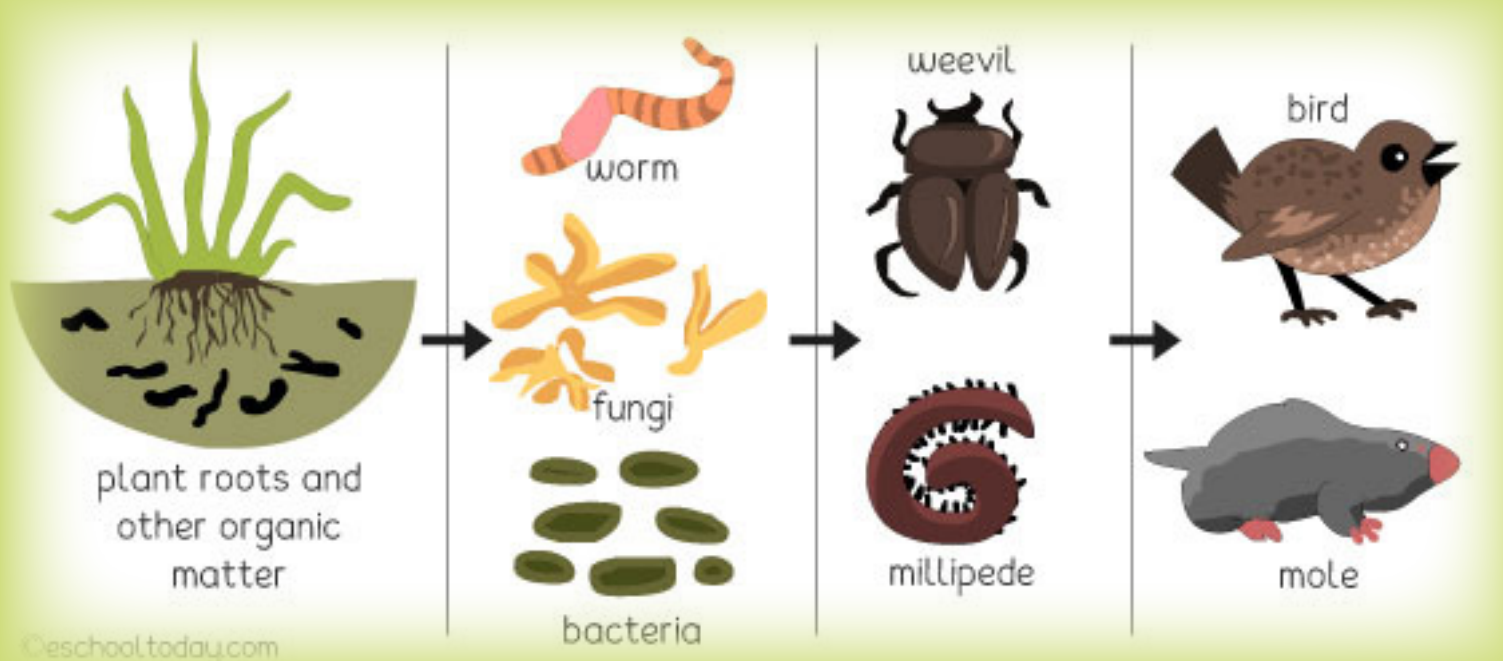
Superb Soil:

All living things depend on soil to live. Roughly speaking, its take 500 years to make 1-2cm of soil! Therefore soil is a limited natural resource that we must look after.

Soil is like a sponge and absorbs carbon from the atmosphere helping to reduce its effect on global warming. The same is true for plants and trees so by making sure we look after our soil and grow lots of healthy plants, we are ensuring we care for our planet properly.

Soils store more carbon than the atmosphere, and all of the world's plants and forests combined, which means that soil is one of our most important weapons in the fight against climate change!

The Soil Food Chain



The Secrets of Soil:

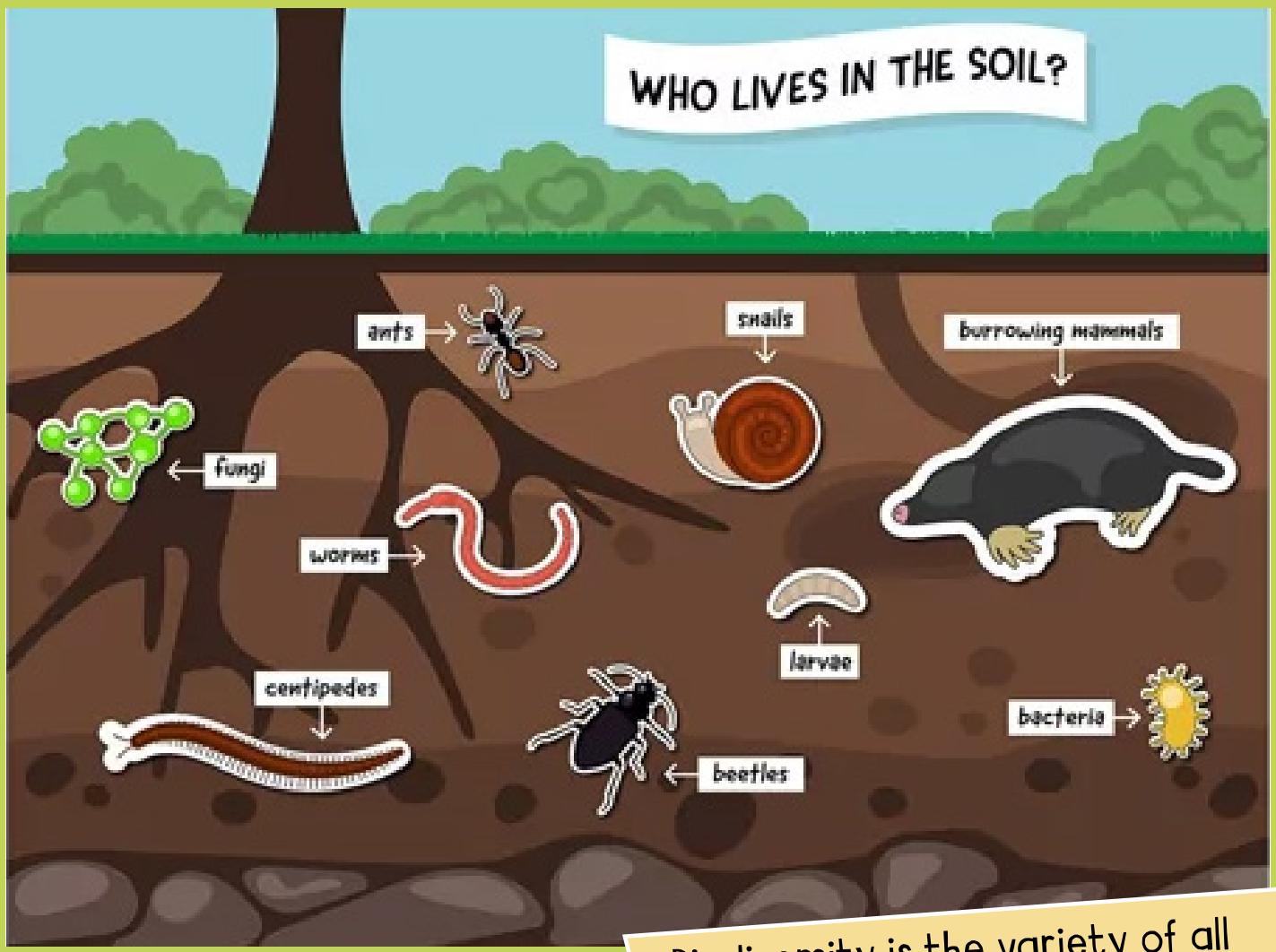
Let's zoom in on the soil and its creatures. Around 25% of the world's biodiversity is found underground. Just 1g of soil (a quarter of a tablespoon) can harbour up to 10 billion organisms - that's more than the number of people living on the planet!

Below Ground

A broad range of organisms from bacteria, fungi and worms to ants, beetles, springtails, mice and moles form a complex underground web and only about 1% of microorganisms living in the soil have been identified so far. By reducing soil disturbance, these organisms are also undisturbed. Covering the ground helps the soil retain moisture, and diverse crop rotation techniques nourish microbes in the soil with a more diverse diet.

Above Ground

Crop diversity calls for a variety of planting techniques including biodiversity strips at the margins of fields or trees and shrubs around the boundaries of farmland (agroforestry). These create habitats for pollinators, like bees, and other beneficial wildlife.

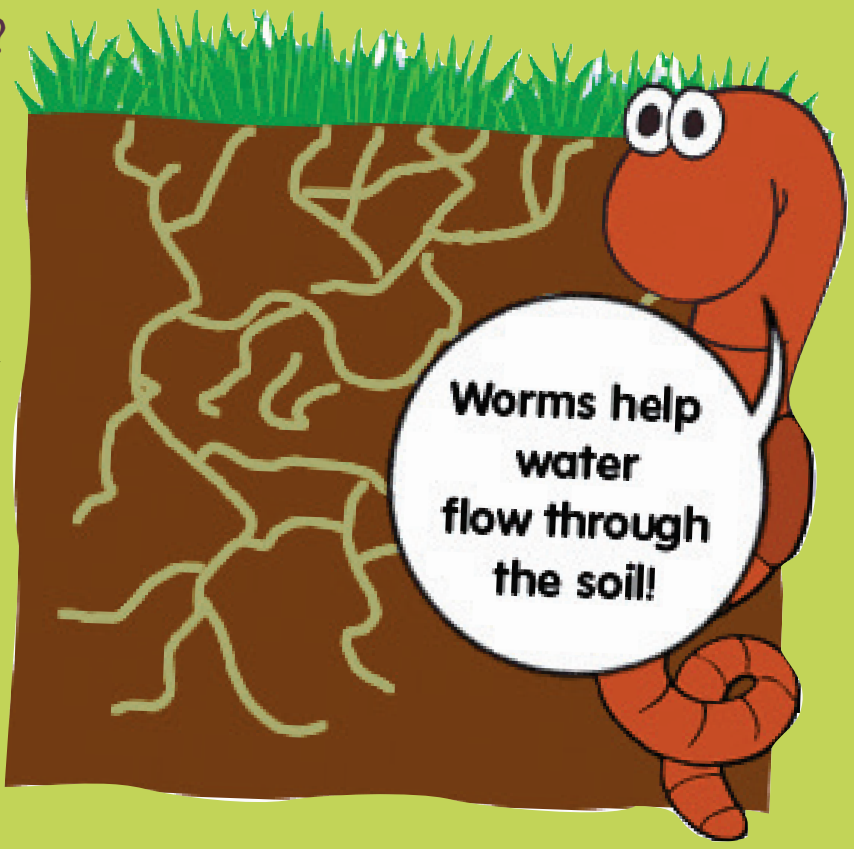


Biodiversity is the variety of all species of animals, insects, plants and people found on our planet

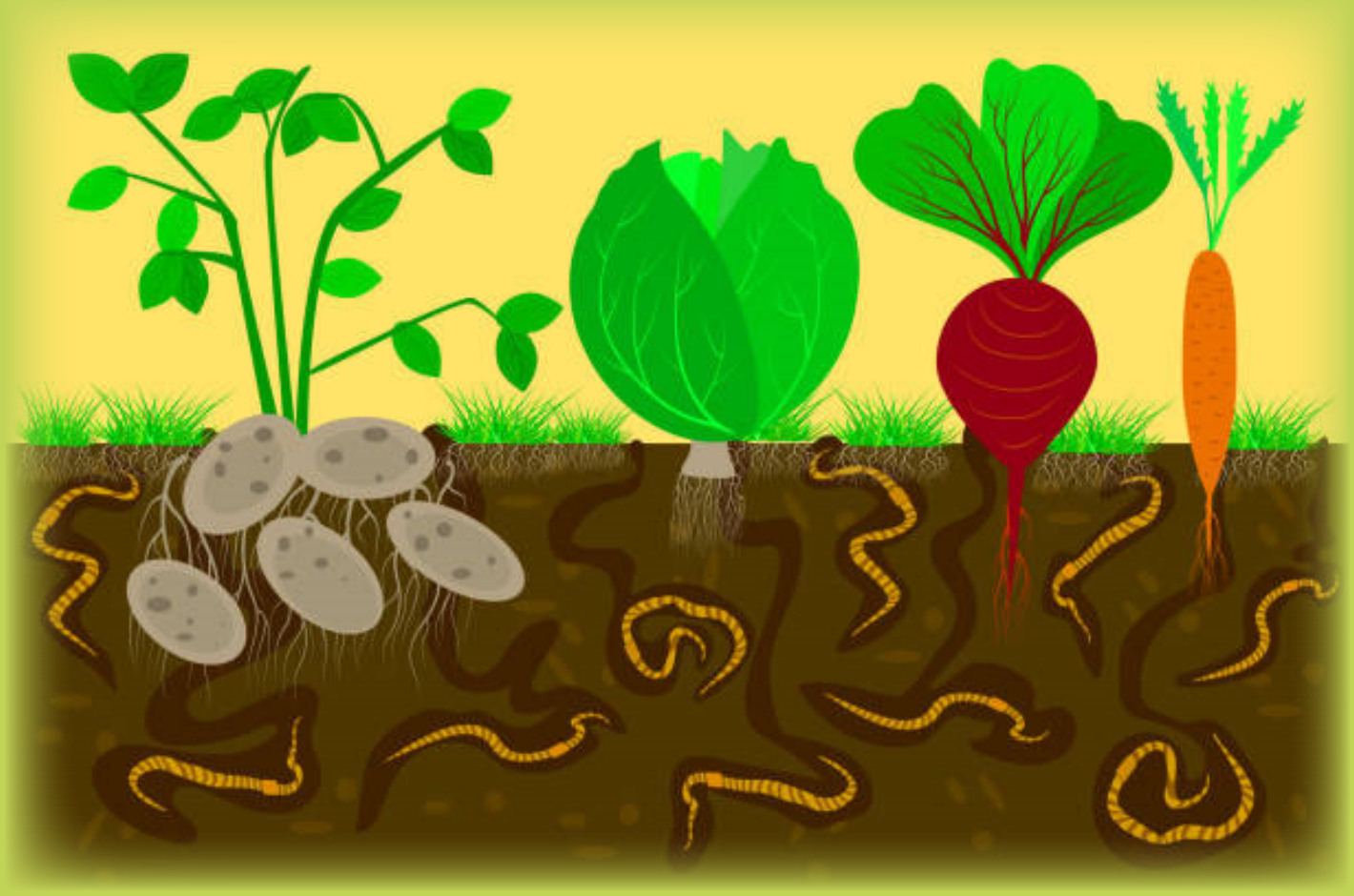
Wonderful Worms:

Why are worms so important?

- Worm poo, known as a casting, is a natural fertiliser for the soil. They also bring nutrients to the top layer of soil as they wiggle and burrow through the soil layers.
- The burrowing worms in the soil means it has improved drainage for water to reach the roots of the plants and more air is able to get to the soil
- Worm castings and soil stick together to improve the soil structure so it can hold more water
- Research shows that soil with more worms in it, grows more, and healthier food for us.



With 95% of food production relying on soil, farmers must make sure they look after the soil to make sure we have enough food to eat. A way they can do this is by using regenerative farming techniques.



Regenerative Agriculture:

Regenerative agriculture is a way of farming that harnesses nature. A regenerative farming system nurtures and restores soil health, protects the climate, water resources and biodiversity and can also increase the amount of food a farm produces and the amount of money it makes. A range of techniques are used to do this including using innovative technology.

There are 5 key themes to regenerative farming

1. Minimise Soil Disturbance
2. Maximise Crop Diversity
3. Keep the Soil Covered
4. Maintain Living Roots
5. Integrate Livestock

1. Minimise Soil Disturbance

Traditionally farmers plough their fields in autumn to prepare the soil for planting seeds in spring. Ploughing a field turns the soil over, putting any leftover plant material into the soil and letting the air get to the soil. It can also break up the soil therefore improving drainage and root growth.

However, ploughing the field can also disturb all the little creatures that live underground like worms and their network of wormholes that help to keep the soil healthy. Additionally, as tractors drive over the soil, it can compact it, making it more difficult for healthy plants to grow from it.

Therefore, regenerative farmers greatly reduce or stop ploughing. Instead, they plant seeds directly into the left-over crops from the last year.

2. Maximise Crop Diversity

The soil and its creatures love variety! Increasing the amount of crops grown above the ground, increases the amount of creatures crawling about beneath the ground which all supports healthy soil. On regenerative farms, farmers try to avoid monocultures, when a single crop is grown in a field instead of multiple crops. Here are some ways in which farmers can maximise their crop diversity:

- Companion Cropping – two crops are grown at once and separated after harvest
- Cover cropping – growing a crop which is not taken to harvest but helps protect and feed the soil
- Interseeding – when cover crops are planted between commercial crop rows
- Relay planting means inserting the seeds of the next crop even as the first one is still growing
- Biodiversity strips at the margins of fields or trees and shrubs around the boundaries of farmland (agroforestry) create habitats for pollinators and other beneficial wildlife.

3. Keep the Soil Covered

Bare soil can be eroded by rain or wind as well as the sun or frost causing harm too. Every minute we lose the equivalent of 30 football pitches of fertile soil. Therefore, by leaving crops in the soil, it acts like a duvet to protect the soil!

4. Maintain Living Roots

By always having roots in the soil, they provide yummy food for bacteria and fungi in the soil. These then provide food for creatures higher up the food chain.

5. Integrate Livestock

Livestock, which can be sheep, pigs, goats, chickens, cows, transform plant material into rich organic matter in the form of their poo! This can then make the soil even better at growing seeds because the soil uses the livestock manure as fertiliser for the plants. The livestock could also eat the cover crops that have been planted.

Benefits of Regenerative Agriculture:

- Farmers can increase the amount of crops they grow. Mixing up the crops grown and having livestock grazing can interrupt destructive weed cycles. Weeds compete with the crops for nutrients from the soil, water and sunlight. Without the weeds, crops can flourish and increase in number.
- The food grown is more nutritious which is important for the health of humans
- Biodiversity increases. Regenerative agriculture has the potential to help repopulate the surrounding ecosystem with beneficial fungi, insects, mammals, and birds.

For more helpful information, please click the following links:

www.syngentagroup.com/en/regenerative-agriculture

groundswellag.com/principles-of-regenerative-agriculture

For a wealth of curriculum based resources and activities for all ages, please visit Countryside Classroom: www.countrysideclassroom.org.uk

What Can You Do?

Do you have a school garden or allotment? How can you put more regenerative farming practices in place in your garden to nurture the soil and harness nature?

Here are a few top tips:

- Mix it up! Grow different fruits and vegetables together in the same plot
- Don't dig! Just plant seeds straight into the ground rather than turning all the soil over before planting
- Add some homemade compost or even some manure to your garden
- Allow areas of your garden or allotment run wild! Or you can even plant bird and bumble bee seed mixes in pots and containers to attract them to your outdoor space.

How does this project link to the curriculum?

Year 3

- Recognise that soils are made from rocks and organic matter.
- Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat

Year 4

- Recognise that living things can be grouped in a variety of ways
- Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- Recognise that environments can change and that this can sometimes pose dangers to living things.
- Construct and interpret a variety of food chains, identifying producers, predators and prey.

Year 5

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- Describe the life process of reproduction in some plants and animals.

Year 6

- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

KS2 Geography:

- Describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle

KS2 Design & Technology

- Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.

CONTACT:

For more information, please contact

Hannah Woods /Shân Buss

Education Managers

Suffolk Agricultural Association

Trinity Park

Felixstowe Road

Ipswich

Suffolk IP3 8UH

IMPORTANT!

Please complete the label (as shown on the right), cut out and attach to your model. Please ensure that labels are laminated and that your model is appropriately packaged for transportation.

Your model must be no larger than 70cm x 70cm x 70cm. It needs to be well put together and be of a sturdy nature as it will be moved around several times.

ATTACH TO YOUR MODEL

School name:

.....

Address & postcode:

.....

Tel number:

.....

Email:

.....

Contact name:

.....

How many pupils worked on your model?:

.....

Age of pupils who have worked on your model?

.....

Entry Form:

We would like to take part in the 2024 Suffolk Farming School of the Year Competition

School name: .....

Address & postcode:.....

.....

.....

Tel number:.....

Email:.....

Contact name: .....

Special educational needs and/or disabilities: .....

.....

NB: Please photocopy this sheet for your reference:

Please return this form by 15 December 2023 to:

Hannah Woods / Shân Buss, Education Managers
Suffolk Agricultural Association,
Trinity Park,
Felixstowe Road,
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SUFFOLK

FARMING SCHOOL

OF THE YEAR

COMPETITION

2024

'Nurturing Nature – Farming our Food'