

Waste Education Service Newsletter

SUMMER 2025





Welcome to the Summer edition of our newsletter!

We deliver FREE recycling and waste awareness workshops across the county to schools, community groups and businesses. Throughout the year we also support a wide range of community events.

Our workshops can include presentations on waste education, reduction and recycling, plus 'hands-on' activities, (including sorting out your recyclable waste).



For more information about our FREE recycling workshops, and to book, scan the QR code or go to:

www.cambridgeshire.gov.uk/residents/waste-and-recycling/waste-education-service



Did you know?

In 2023/24 our Waste Education Officer successfully carried out over 190 engagements across Cambridgeshire where over 12,000 people attended!

Safety reminder as batteries cause several fires

Charging batteries has already caused several fires in homes across the county so far this year. Significant fires in Cambridge, Wisbech, Peterborough and Soham have occurred in the last few months.

Firefighters have been called to fires involving batteries being over charged, resulting in thermal runaway from the lithium-ion contained in them and causing significant damage to people's homes.

Station Commander Gareth Boyd, one of the Service's community risk managers, said: "These incidents highlight the potential risks that lithium-ion batteries can pose and how it is vital for people to be alert when charging any kind of device. Last year firefighters attended around 20 fires involving batteries charging in homes, with more occurring already in 2025.

Most devices come with safety features to ensure they do not overheat when being charged. Using the charging packs, cables and plugs provided by the manufacturers, rather than cheaper versions will help charge devices safely. Replica replacement chargers sometimes don't have these features and can end up overcharging the battery, which causes thermal runaway

leading to explosions and rapidly intense fires.

We have seen items for sale, at car boot sales as well as online, that people can use to convert a standard bike into an e-bike. These whilst seemingly a cheap alternative can be highly dangerous and do not conform to the required standards to be sold in the UK."

The Service has also attended several fires involving batteries being disposed of in household bins.

Gareth added: "Batteries can be a fire hazard if they are not disposed of properly. They should never be put in household rubbish or recycling bins.

During the processing of waste or recycling, a battery can be compacted and damaged, which can lead to ignition of the highly reactive lithium, leading to a fire starting.

Any kind of battery can cause a fire if not disposed of correctly and safely. This includes vapes or other e-cigarettes as well as standard batteries.

Fires involving batteries cause damage to refuse vehicles and roads, as well as significant delays to bin collections and road closures." There are many places to safely dispose of batteries. As well as local recycling centres, many shops around the county have collection bins in-store.

To find your nearest battery collection bin, visit either:

www.recyclenow.com www.recycleyourelectricals.org.uk

Residents are being reminded to Take Charge and Be Safe, remembering some simple tips to help keep themselves and their families safe.

Find out more by visiting www.cambsfire.gov.uk



Hidden batteries cause fires

What happens to our recycled plastic?

As the Waste Education Officer for Cambridgeshire, I am often asked by schoolchildren and members of public about what happens to plastic bottles and other plastic items sent for recycling. In a bid to learn more and to seek answers to this question I recently visited IPL in Castleford, one of the largest UK processors of recycled plastic. This is what I discovered.













- 1. Plastic items placed in the recycling bin are sorted and baled at a material recovery facility, (MRF) before being dispatched to processing plants such as IPL in Castleford.
- **2.** Upon arrival at the processing plant the bales are opened and the contents are tipped into large shredders.
- 3. They are then shredded into large flakes.
- **4.** The flakes are then immersed into large washing tanks where they are cleaned. The shredded flakes then enter a paddle separation tank which is full of water. High density plastic such as bottle tops sink to the bottom and the lighter plastic floats on the surface. The water is cleaned and recycled in a closed circuit.

The flakes themselves are then rinsed and dried in a centrifuge. Here labels and other impurities are removed.

- **5.** The flakes are then fed into an extruder where a rotating screw heats the plastic until it softens, and additives and colourants are added, (depending on what the plastic is being used for).
- **6.** The material is then cooled and cut into pellets, before being stored in large sacks or bags.

These pellets are then shipped to various manufacturers throughout the UK, where they are used in the manufacturing of packaging, car parts, textiles, furnishings, construction, even to make new wheeled bins and food caddies!

Last year IPL recycled more than 38,000 tonnes of plastic which would have either been landfilled or gone for energy recovery.

Find out more about IPL at their website: iplbrightgreen.co.uk

Commenting on his visit Jon added:

My visit to IPL was fascinating. It greatly improved my understanding of how plastic is recycled and how many uses across a variety of industries it has.

Jonathan Attwood, (Head of Technical Quality Control at IPL) was my guide for the day and his explanation of the processes involved in recycling plastic was excellent. Samples of finished material & examples of products IPL kindly provided are proving to be an invaluable teaching asset.

The IPL contact came about thanks to Kate Bedford, Richard Cham and Paul East from RECOUP who made the initial approach. Thanks to everyone who made this visit a success.



Food Waste Workshops

In an exciting initiative aimed at tackling the urgent issue of food waste in the UK, workshops focused on reducing food waste are being delivered in primary schools across Cambridgeshire.

Each year, the UK generates over 6 million tonnes of edible food waste—an astonishing amount. Jon Crisp, Waste Education Officer at Cambridgeshire County Council, highlights the gravity of the situation, "That's enough to feed the entire UK population three meals a day for 11 weeks."

Professional chefs Rowen Halstead & Mandy Mazliah are taking the lead in teaching children how to minimize food waste through hands on cooking lessons. Students learn to transform leftover food into delicious meals, such as creating tasty fruit desserts, making cheese from excess milk, and whipping up pesto from unwanted herbs and vegetables. These practical lessons not only give children valuable cooking skills but also install a deeper understanding of sustainability and resourcefulness in the kitchen.

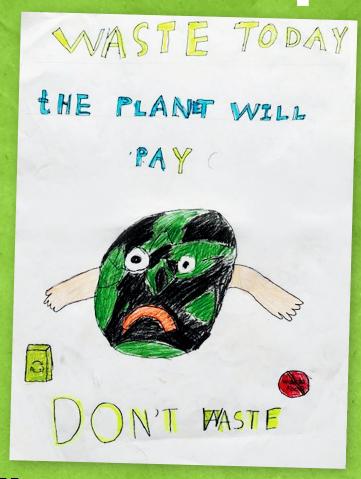
To further reinforce their learning, students are encouraged to create colourful posters that present tips and strategies for reducing food waste at home. These artistic expressions serve as a powerful reminder of the role everyone can play in combating this pressing issue.

This summer term, around 50 workshops are being rolled out across primary schools in Cambridgeshire, with an additional 30 workshops planned for the autumn. Jon adds, "The posters are amazing, and they really demonstrate that the children have taken on board the need to reduce food waste. By adopting simple measures like using leftovers and surplus ingredients found in every kitchen, we can make a real difference in the amount we throw out, and help to keep the rising cost of food down."

As we continue to highlight these efforts, it's clear that fostering a culture of sustainability in our schools is not just beneficial—it's essential for the future of our planet.

An example of just some of the food that goes to waste in Cambridgeshire





The talk was engaging and informative, with learners continuing the discussion into our tutorials afterwards. I have also noticed a significant increase in the student hub of recyclable items being placed in the correct recycling bin, rather than general waste. Additionally, many of our students have large sections of their workbooks/assignment where they must write about waste disposal of various items from veterinary clinics all the way to wildlife reintroduction projects. Students have included a large amount of the information Jon shared within their work demonstrating their increased understanding of waste disposal and knowledge of this important topic area. Jon's talk has been very influential over this section of their studies.

Lecturer in Animal Management, College of West Anglia, (Cambridge Campus).

eco extravaganza tour

Waste Education Officer, Jon Crisp, is touring our libraries this summer - play the Recyclables Bean Bag Game!

Make your very own bird feeder and plant pot, then plant something you can grow and eat!

Warboys Library Papworth Library Wisbech Library Rock Road Library Tues 24 July, 10am-12pm Thurs 31 July, 2-4 pm Tues 5 August, 10am-12pm Wed 6 August, 10am-12pm Wed 13 August, 10am-12pm Wed 13 August, 2-4pm



For booking details see www.library.live/whats-on

For children aged 3years+



- Success in Schools ©











School food workshop takeaways

Here are a few helpful hints from our chefs' tips and guidance to help you get the greatest value from your food.

Plan ahead

Simple, flexible and realistic planning will help you make the most of your food. Take a few moments to consider what you need. Make a list before you visit the shop and try to stick to it.

Storing food after shopping

Putting your food away in the right places keeps it fresh for longer. Check the fridge temperature. It should be below 5°C to ensure food stays fresher for longer.

Keep an eye on your fresh food

Keep food close to the end of its life at the front of your shelf or create an 'eat me first shelf'.

Learn what date labels mean. 'Use by' is about food safety. 'Best before' is about food quality. You could save money by not throwing food away in error.

Eat all edible parts of your food

There is no need to peel carrots and potatoes. Why not use cauliflower leaves in cauliflower cheese. Greater value for the same price.

Freeze your leftovers

If you cook too much, why not put your leftovers in a sealed container and freeze them for another day. Remember to label and date your food. Remember to eat them within 4 months of freezing though!

Remember from March 2026 you will have a weekly collection of food waste.

Compost unwanted food

Depending where you live in Cambridgeshire you may be able to currently recycle your food with your garden waste. This will change when the new service starts and food waste will be collected separately from garden waste.

Vegetable peelings and rotten fruit can be composted at home very easily. For further information visit Garden Organic's composting guide.

www.gardenorganic.org.uk/expert-advice/garden-management/composting

Make fruit pots with leftover fruit and old biscuits

Ingredients

Handful chopped fruit (whatever you have eg bananas,strawberries, apple, grapes, blueberries, melon, mango).

100-200g fruit compote (optional).

100-200g yoghurt (optional).

2 biscuits, crumbled or 50g granola.

Directions

- 1. Add a spoonful of compote to the bottom of a glass or pot.
- 2. Add some chopped fruit then cover with a layer of yoghurt if using.
- 3. Sprinkle over some crumbled biscuits or some granola
- 4. Repeat, two or three times, until you have a layered pot.



Sign up to become a food waste volunteer!

By 31 March 2026, food waste will be collected from most households every week, instead of once every two weeks. Food waste will then be collected separately from garden waste.

As well as helping everyone think about the amount of food they purchase, we want food waste to be recycled effectively.

We're looking for volunteers to go out anytime, to talk to householders on their doorsteps and let them know about the new services.

We'll provide full training, as well as examples of the items that will be delivered by the district councils, to householders.

If you're interested in volunteering, just scan the QR code to sign up.

Any personal data you submit will be kept in strict confidence in accordance with the data protection policies of the organisations involved.





How does a Material Recovery Facility (MRF) work?

Have you ever wondered how the items you put into your blue recycling bin are sorted out? They all go to a Material Recovery Facility, (or MRF) for short.

There are 8 steps to Materials Recovery

- 1. The collected material is delivered to a Materials Recovery Facility (MRF) and tipped into the loading area.
- **2.** It is then fed onto loading conveyors by mechanical shovel. The purpose of using conveyors is to provide a controlled, constant flow of material to the system.
- 3. The material is transferred onto an elevating conveyor, which in turn feeds the material to the pre-sort conveyors. The elevating conveyor operates at a faster speed to thin out the material depth for delivery to the pre-sort area.
- **4.** Once in the pre-sort area the non-recyclable material is manually picked out and discharged into the storage bays below.
- **5.** The mixed material flowing from the pre-sort area enters two trommel screens which then separate into three components:
 - · Containers and fine materials
 - Newspapers and magazines
 - · Card and some papers
- **6.** The materials are further processed using disc screens and conveyors. The MRFs are equipped with sophisticated automatic recognition and sorting of products. This system is used in three separate locations within each facility and works on an optical identification and separation using air jets.

- **7.** Following the automated process of separation, the product lines are monitored manually, and any non-recyclable material is picked off and goes into a residual storage bay.
- **8.** A magnetic separator removes steel cans automatically and transfers them to a storage bunker. An eddy current-separator is used to extract the aluminium cans which are stored in another bunker.

These materials are separated in the process:

- Plastics
- · Aluminium and ferrous metal cans
- Newspapers, pamphlets and magazines
- · Mixed paper
- Cardboard

The sorted materials are then baled and compacted to reduce their volume for easier transport.

Baled materials are shipped to processing facilities, such as paper mills, plastic recycling plants, or metal recycling facilities, for further processing and recycling into new products.



Calling all schools, community and adult groups in Cambridgeshire!

Waste Prevention Education Free Works 1005

To book a visit to your school or organisation and for more information please contact wmt@cambridgeshire.gov.uk

FREE workshops at any location across the County include:

- Tailored educational workshops for school, community and adult groups.
- Learning what waste is and what we can do to prevent, reuse, repair and recycle it, sort it for recycling or make something from waste material.
- Videos showing the processes involved in sorting and recycling waste.
- A discussion around **climate change** and an explanation of what an **individuals carbon footprint** looks like.
- Workshops are ideal for classroom settings and pupils work in groups on a variety of tasks.
- A typical workshop lasts around 60 minutes. We can deliver up to three workshops per day and can visit a school for two days if required.

We offer outreach visits on weekdays, in the evenings and at weekends.

Contact us if you have an upcoming event in Cambridgeshire you would like us to support.



For more information about our FREE recycling workshops, and to book, scan the QR code or go to:

www.cambridgeshire.gov.uk/residents/ waste-and-recycling/waste-education-service



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