BioBuzz Márta 2025

BEST – Bioeconomy Education and Sustainability Teachers Network: Giving a Voice to All

Hi Everyone and welcome to our March edition of BioBuzz. With the arrival of spring and new beginnings we are doing a bit of a refresh here! You may notice some changes including our name- BioBuzz! You will also spot a new section of the newsletter, dedicated to **BEST - Bioeconomy Education and Sustainability Teachers Network**. It really is the best! Don't worry though, we still have all your favourite features like our career profile, nature activity, joke corner and all the latest news from the world of Bioeconomy. You can also find all the past editions of BioBeo Buzz along with lots of other great resources from the BioBeo project including videos and comics <u>here</u>.

Introducing The BEST Network: A New Era for Bioeconomy Education



Launched in March 2025, The BEST Network is a dynamic community of educators committed to advancing bioeconomy and sustainability education. Kicking off with the inaugural meeting at the BioBeo Blended Intensive Programme (BIP) in Rotterdam, the network is set to foster ongoing collaboration through the BioBuzz Newsletter and an annual BEST meeting.

Educators involved in the BioBeo BIP will lead the charge, shaping the network's growth and actively recruiting new members from BioBeo electives and student teacher BIPs. This initiative promises lasting impact, ensuring that bioeconomy and sustainability topics remain at the forefront of education for years to come. The BEST Network is more than just a community—it's the future of bioeconomy education.



The BEST Network is a dynamic community of educators, home educators, and anyone passionate about Education for Sustainable Development (ESD) and bioeconomy. By signing up to BioBuzz, members have access to ongoing updates, key educational initiatives, and a treasure trove of resources for teaching and learning about bioeconomy and sustainability. The steering committee comprises members from University College Dublin, Ireland, Maynooth University, Ireland, Rotterdam University of Applied Sciences, The Netherlands, and Odisee University of Applied Sciences, Belgium and their collaboration ensures the continued growth of the network. The integration of sustainability concepts into education is essential for equipping the next generation of leaders to tackle the pressing challenges of our time.



Answering the Curlew's Call Video

After last month's successful launch of the comic "Answering the Curlew's Call", we are delighted to tell you that you can now watch as an animated video <u>here.</u>



BioBeo: Answering the Curlew's Call. A Beo and Raja Adventure



Q: What did the bat say to the friend who returned after missing a day of school? A: Welcome bat! Q: How do you make a bat stew? A: Keep him waiting.

Nature's Superheroes- Bats!

Last month we heard about the amazing impact that Beavers had on an ecosystem in the Czech Republic, but they are just one example of a nature based solution! Many different plants, animals and habitats help us in ways we might not imagine! This month we will focus on an unlikely hero – bats! If you watch horror films, they may not always have the best reputation but they are a crucial part of ecosystems around the world.

There is a group of bats that are carrying out a very important but unusual job! In two libraries in Portugal, bats have taken on the role of book guardians and the librarians are happy to have them! The <u>University of Coimbra's</u> library is 300 years old and contains many historic manuscripts. A colony of pipistrelle bats are long time residents of the *biblioteca*. They aren't just taking advantage of a comfy spot to live, they also provide a valuable service by eating the flies, gnats and other insects which would otherwise cause severe damage to the manuscripts.

Library staff are happy to clean up after the bats in exchange for this service. They use special table coverings to keep them clear of bat droppings every evening. Librarians say they often hear the bats vocalising in the late afternoons! So, despite the length of time the bats have been present, they have not yet learned first rule of libraries- to Shushhhhh! Fun fact - there are two Irish words for bat 'ialtóg' and 'sciathán leathair'. The latter means 'leather wing!'



FEE Global Action Days (April 22nd to May 6th)

Do you want to protect our planet? Join the global movement during FEE's 2025 Global Action Days, supported by UNESCO, NAAEE, IUCN CEC, and more! This year's theme, Ecosystem Restoration, unites thousands of participants from countries around the world to address biodiversity loss and ecosystem degradation.

Vhy join?

- Y Take part in hands-on activities that make a tangible impact on restoring our environment.
- Connect with communities worldwide and foster global cooperation for environmental action.
- S Inspire positive change and help create a sustainable future for all.

Over 14 days, explore 5 impactful and flexible activities designed for all ages and abilities, plus bonus activities to involve families and communities.

<u>Register now</u> to access resources, join a global effort, and inspire others to act!

Share your involvement and connect with others through the Global Action Days Facebook group.

Let's make a difference together and help restore our ecosystems!

You definitely won't want to miss Activity 3- Building a bioeconomy legacy, which features lots of great ideas for actions you can take in your community. This activity is designed to bring all ages together to learn from past generations so that we can build stronger, more resilient ecosystems for future generations.

You can find out more information about all of the activities plus the resource pack <u>here</u>. What are you waiting for?!







BioBeo Bioeconomy Puppet Show -World's First!



Maynooth University and University College Dublin cocreated the world's first circular bioeconomy puppet show, with students from Maynooth University and University College Dublin. The students used biobased materials for its puppets and stage, with the story based on Answering the Curlew's Call. Developed as part of the BioBeo elective module in Maynooth University, the project blends sustainability education with Irish cultural traditions, incorporating traditional crafts like knitting and crochet.





The puppet show raises awareness about biodiversity conservation through the story of the endangered curlew bird, integrating both Irish language and sustainability themes. Teacher guidance notes help replicate the project in classrooms worldwide, spreading the message of sustainability and cultural heritage. This innovative initiative demonstrates how education can merge environmental awareness with cultural preservation for lasting impact. Look at the video here: <u>BioBeo: Answering</u> <u>the Curlew's Call: The Puppet Show – YouTube</u>



Nature Quiz

We have heard about the great work being done by bats to protect historic manuscripts but is it true that as well as catching insects when flying they also like to fly into people's hair?

1.Yes, its true. Aways keep your hair covered around bats. 2.No, that's not true! That's just an urban legend.

Answer on the last page!

Sowing the Seed by Edwina Guckian (Part 1)

Enjoy reading below about the work in Ireland to revive and continue traditions!

A State

You'd hear them coming down the road; their music, drums and cheering echoing round the frosty hills. Some Christmas nights I'd imagine I heard them with the anticipation of their arrival but when they did come my heart would be racing with excitement and fright, a bit like the possibility of meeting Santy! A blur of straw, ribbons, rags, meal bags, bailing twine, net curtains, tea towels, jackets inside out, one welly, one boot, tinsel, skirts on harry legs, black faces, white eyes; were they men or women and how many exactly of them there were I could never tell.



As a child I always knew it was my grandad playing the fiddle when he came in disguise to our house at Christmas with the Mummers. I knew his boots and his long fingers crouched across the strings, moving so gently and inconspicuously, much like how he moved himself.

They would sing, dance, play music, tell stories and bring lots of devilment into our home. We'd feed them and giving them some money and wave them off down the road to the next house they thought would welcome them with a trail of straw left behind them. The Mummers went from house to house across the 12 days of Christmas, the Wren Boys hunted the wren on St. Stephen's Day, the Biddy Boys on St. Brigid's Eve and the Strawboys were all year round for weddings and wakes.

But they all had much the same goal; to bring good luck to your family and your home for the next year. In our house, waking up on St. Stephen's Day was just as exciting as Christmas Day. My cousins and I would spend weeks planning the route we'd travel, designing our costumes, practicing songs and tunes on our tin whistles, finding the right tin for collecting the money and praying for dry weather for our day of wandering the roads. My mother regularly headed off at weekends with a bag of colourful clothing and straw hat when the call came for the Strawboys to appear at a local wedding. I loved listening to her stories when she came home of the craic they had. When I was 10 I finally got called up to the Strawboy squad. This group of people I performed with for many years were all so talented in their music, song and dance. They didn't see themselves as professionals; they were just people who kept traditions going in their areas but they had a huge influence on me. They were also the biggest collection of Leitrim and Roscommon messers you could come across therefore making the perfect clatter of Strawboys. I have the best of memories from these times and revisit them often. As these Strawboys got older they stepped back from their roles in the hope the next generation might carry it on. Times change, ways of life change, interest fades, generations move away, memories and stories are lost and it's as simple as that for a tradition to die out in an area.

In February 2019 a lady from the Heritage Council of Ireland came to my grandfather's old workshop at the side of our house with a van load of straw and taught me the basic skills needed to make the hats and skirts of the mummers. Once you have those you can then work on your own designs. Like many of the crafts made from straw, the hat starts with the making of a straw rope. This was something I had done since I was a child on our farm. Twisting the handle rhythmically as my grandfather and father fed the hay into the rope and reversed slowly away from me. I wanted to pass on my newly learned skills to the youths at the club so that they too could all make their own hats and costumes but sourcing straw was the issue. Modern



harvesting means the oats are no longer cut by hand but mulched into bales. The straw the Heritage Council lady brought to me had to be sourced in England. Sitting at the table that night sharing my straw problems with my family my dad said "Sure why don't you just grow it yourself!". Now, I'm pretty sure that's something my father possibly looks back and slightly regrets saying, for all the work I've put him through since and the swarths of land I've "borrowed" from him for growing oats, not that he'd ever say it. But this is where the project began "<u>Sowing the Seed</u>".

Check back next month to hear all about the project or get a head start and check out the website here!

Óstán Feithidí This article is available 'As Gaeilge' or in English below.



Scríobh Caoimhe, Charlie, Cian, Eoin & Siofradh an t-alt seo. Is scoláirí oideachais iad i Roinn Froebel, Ollscoil Mhá Nuad.

Réamhrá

Is féidir leat do sheanchannaí stáin a athchúrsáil trí óstáin feithidí a dhéanamh i do ghairdín. Tá sé an-simplí é a dhéanamh agus ní thógann sé ach thart ar

leath uair an chloig!

Trealamh:

Canna folamh.

Ábhar orgánach, mar shampla seanadhmad nó coirt scaoilte. Sreangán/ Téad/ Ribín. (Roghnach)



Treoracha:

1.Nigh an canna agus bain aon lipéid agus athchúrsáil iad.

- 2. Bailigh seanadhmad agus coirt scaoilte ó do ghairdín nó páirc áitiúil nuair atá an canna ag triomú.
- 3. Líon an canna le hábhar orgánach nuair atá an canna tirim.
- 4.Croch an canna ar an gcrann le sreangán/téad nó cuir an canna i bhfolach sa ghairdín, nuair atá an canna lán.

Ná gearr do lámh ar an gcanna!

Is féidir leat ábhar orgánach difriúil a úsáid chun feithidí éagsúla a mhealladh:

- Feadáin bheaga, cosúil le giolcacha, luachra nó bambú chun beacha aonair a mhealladh (Ná húsáid plaisteach!).
- Duilleoga, cipíní nó tuí chun bóíní Dé, ciaróga agus feithidí eile a mhealladh.
- Cairtchlár rocach chun lasóga a mhealladh.



Bug Hotel



This piece was written by Caoimhe O'Neill, Charlie Walsh, Cian Denton, Eoin Moran & Siofradh Ní Chruadhlaoich, students of the Froebel Department in Maynooth University.

Introduction

Creating a bug hotel is a great way to recycle your old tin cans whilst also providing a home and a safe space for all of the insects and creepy crawlies in your garden. It is simple to do and only takes about half an hour!

You will need:

Empty tin cans Organic material, such as dead wood and loose bark String, twine or ribbon (Optional)

Instructions:

- 1. Wash the can and remove and recycle any labels.
- 2. While the can is drying, collect bits of dead wood and
- loose bark from your garden or your local park.

3. When the can is dry, fill it with the organic material. Make sure it is well packed to create a cosy bed!

4. Once full, you can hang it on a tree with some string/twine or hide it somewhere in your garden.

Be careful of sharp edges when working with empty cans! Ask an adult for help if you need it.

Dead wood and bark are great for attracting creepy crawlies but you can use different organic materials to attract different insects:

- Small tubes, such as reeds, rushes or bamboo to attract solitary bees (don't use plastic!).
- Dry leaves, sticks or straw to attract ladybirds, beetles and other bugs.
- Corrugated cardboard to attract lacewings.





Career Profiles:

Name: Rita Escórcio

Role: PhD Student in NOVA University of Lisbon, investigating bio-based materials from plant polyesters

AN OVERVIEW OF YOUR JOB:

As part of my work, I carry out research on plant polyesters and bio-based materials made from industrial agricultural waste, mainly tomato pomace (the tomato's seeds, stems, and peels after they are processed to make ketchup, for example).

HOW LONG HAVE YOU BEEN IN THIS ROLE?

As part of my bachelor's, master's, and doctoral degrees, I have been working on the valorisation of tomato pomace for eight years!

WHERE ARE YOU USUALLY BASED?

I'm now based in Lisbon, Portugal, where I spend the majority of my time in the lab at ITQB NOVA at the NOVA University of Lisbon.





WHAT'S THE FAVOURITE PART OF YOUR WORK?

I like challenges, and scientific research is full of them. My favourite part is undoubtedly the bench work (pipetting, weighting) and being in the laboratory.

WHAT'S THE MOST CHALLENGING PART OF YOUR WORK?

To establish a balance between the experiments and the writing/reporting part. Bench work is always more enjoyable, and data organisation and writing can lag behind at times.



HOW DID YOU GET INTO THIS CAREER?

Science was always one of my favourite subjects in school, and Biology looked like the perfect choice for understanding and exploring nature! Then, while studying for my bachelor's degree, I discovered the valorisation of industrial wastes and haven't looked back since.

BESIDES FORMAL QUALIFICATIONS, WHAT SKILLS OR TRAITS ARE MOST USEFUL FOR YOUR TYPE OF WORK?

I'd say perseverance and determination; experiments don't always work, and failure is a common occurrence. To that, I would add creativity and ingenuity; after each failure, we have to develop another way of trying again or move into another direction.

A TYPICAL DAY...

When I get to the laboratory, the first thing I do is open my computer and check my emails. Then I proceed to see whether I have any experiments planned and/or organised for that day; normally on Mondays, I prepare the experiments for the week and book the equipment that I will need. If I don't have any experiments scheduled for the day, I normally spend my time on the computer analysing or organising data.

while

you

<u>your own well-being.</u>

understanding



Nature Quiz Answer

The correct answer is..... 2. No, bats do not fly into people's hair. That is just an urban legend!



sure you check out the BioBeo website by scanning the QR code! Buzz you again soon!





UNIVERSITAT HOHENHEIM

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Odisee

SHE COHOSTS!

HEAR MORE FROM RITA IN THE AMAZING BIOECONOMY MATTERS PODCAST, WHICH

WHAT ADVICE WOULD YOU GIVE TO A YOUNG PERSON INTERESTED IN THIS CAREER

PATH?

It is critical to establish boundaries and

care for your mental health; burnout is

common in scientific research because

the

contributing to the development of new tools and materials, you frequently forget

excited

world

are

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and

Bioeconomy Matters Podcast

<u>Bioeconomy Matters</u> - your daily dose of sustainability! Tune in this month to hear all about development of Latin America's bioeconomy!

In <u>this episode</u>, Henry Alterio discusses his experiences in the development of Latin America's bioeconomy, with an emphasis on Colombia. Given that the Amazon rainforest covers a considerable area of Colombia, biodiversity protection awareness has grown in recent years. By 2030, the country hopes to create half a million new green jobs related to the bioeconomy.

CASE

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