# International Women's Day 2022 "Gender equality today for a sustainable tomorrow"

For International Women's Day 2022, Dr Ally Gormally-Sutton wrote a blog post in response to the #BreakTheBias theme and the UN's call for "Gender equality today for a sustainable tomorrow". In this, she talked with some of Lancaster Environment Centre's (LEC) inspirational women about their roles in creating a more sustainable future, asking them about what brought them to LEC, what their work involves and where they find their inspiration, as well as their views on sustainability. The answers the women gave were fascinating, insightful, and inspiring in their own right, and we didn't want to miss the opportunity to share them in full, beyond what Ally could capture in the blog article.

Read Ally's blog article: Women fighting climate and ecological breakdown

Below are the full answers given by the five women (click on their name to jump to their section):

- <u>Tilly Elwell, undergraduate BA (Hons) Geography</u>
- Millie Prosser, postgraduate researcher
- Dr Andongma Awawing, Senior Research Associate
- Dr Ali Birkett, Research Promotion Coordinator
- Dr Annette Ryan, Head of Technical services

#### **Author biography**

<u>Dr Ally Gormally-Sutton</u> is a Senior Lecturer in Geography in the Lancaster Environment Centre and also LEC's academic lead for <u>Athena Swan</u>. Her research interests include energy and society, and society and the underground.

# Tilly Elwell, undergraduate BA (Hons) Geography

# 1. What's your role in LEC and what led you to the department?

I am an undergraduate student in my third and final year of studying Geography at Lancaster University.

The environment and natural world is something I have always had a passion for and because of this Geography was always my favourite subject at school. As a result doing a degree in Geography was the obvious choice! With the impacts of enhanced climate change becoming ever more prevalent throughout my life and being able to actually see the changes happening in front of my eyes solidified my aspirations.

#### 2. Can you tell us a bit about your research / dissertation / job and why it's so important?

The title of my dissertation is- "The successfulness in the communication of messages relating to environmental degradation through sculptural art". Alongside Geography, art has always been a strong passion of mine so finding a way to incorporate this into my dissertation was very important. I have believed for a while now that the communication of climate change, environmental harm and sustainability to the general public is an absolute necessity if we want change for the better. It has become evident the need to successfully communicate these messages and this is often a challenge



when scientific information needs to be simplified for the general public to understand. Art can be a powerful tool in engaging people and helping them understand the challenges that are being faced. Sculptural art in particular adds an extra dimension to what can be communicated and learnt due to the three-dimension experience it can create.

More specifically I focused on the four sculptural artists: Jason deCaires Taylor, Edith Meusnier, The Wertheim sisters and Sayaka Ganz. Not only did their artwork grip me but they were also so diverse and by comparing these sculptures it became evident which characteristics of the sculptures made some more successful in communicating messages of environmental degradation than another's. To do this I sent a questionnaire to the artists and one to the general public. It was found that the sculptures with a clear message, were eye-catching, made people curious and were placed in a setting that enhanced the meaning behind the work were all factors that strengthened the communication.

This is so important because sculptures are widely accessible to everyone and can be understood by anyone. It was found that even passive art viewers (non-artistic people) could also understand what the sculptures were trying to say and many people commented that seeing these sculptures would make them think about their everyday habits and how they could change them to become more sustainable.

## 3. What's your career highlight to date and / or who has most inspired you?

I wouldn't say that a specific person has been inspirational throughout my life but fantastic organisations such as the IUCN, RSPB and WWF have done some amazing work in helping to conserve the planet and its species. These have inspired me to want to work alongside them to help increase the conservation projects in the world.

Recently, I had a lecture by Elizabeth Radford who is the current CEO of Eden Rivers Trust but has also worked with PlantLife International and the RSBP. She told us about some of the diverse work she has done all over the world and hearing from people who have made a difference in the subject you are interested in is really inspirational. She made me realise that it is possible to go out there and really make a difference, even if it is on a small scale- every action contributes to global sustainability.

On top of this, in my module Africa: Geographies of Transformation, I have come across Yvonne Aki-Sawyyer, the Mayor of Freetown, Sierra Leone. She is coming up with innovative ways of improving the wellbeing of residents in the city through her "Transform Freetown" initiative. One way she is doing this is aiming to increase vegetation cover by 50% by the end of this year. This involves working with the local community to plant 1 million trees, not only does this prevent against landslides which are becoming increasingly common but it also helps to increase community spirit and involvement in their local area. Yvonne really seems like a women who is trying to make positive change to the people of Freetown in a sustainable way!

#### 4. Who are the people who have inspired you most in your career to date?

Same as above

#### 5. Finally, what does sustainability mean to you, or why do you feel it's so important?

To me, sustainability means ensuring the survival of the planet for many years to come. We need to find innovative measures that allow us to live alongside nature in a much less damaging way than we are now. We need to ensure the survival of nature's resources and at the same time give increasing support



to those marginalised communities who need our help to rid themselves of poverty in a way that is not harmful to the planet. We want to live in a healthy world where there is equality for all and we want this for future generations too.

# Millie Prosser, postgraduate researcher

#### 1. What's your role in LEC and what led you to the department?

I completed my undergraduate degree in LEC choosing a variety of environmental science and ecology modules, after completing my final year project my supervisor (Andrew Jarvis) and I wrote a proposal to CGE for a funded research masters project to continue some of the ideas developed in my undergraduate thesis.

# 2. Can you tell us a bit about your research / dissertation / job and why it's so important?

My masters research has looked at how local authorities can make carbon visible in their decision-making processes. I've worked on marshalling publicly available/existing methods to develop simple, transparent ways for them to estimate whole footprint (especially indirect or scope 3) emissions in house. The approach looks to utilise existing accounting and financial machinery already tracking the flows of money and empower authorities with the tools to also track the flows of carbon. It draws on an established spend-based carbon accounting approach that utilises sectoral emissions intensities. The approach is a starting point for high level estimates to start informing decision making, as experience develops recursive refinements to the estimates can be employed.

The work has very much been applied science and more specifically action research with the focus on practical real-world application. This has meant I've spoken to a wide range of authorities across the UK to ground the research in what is possible and practical. I recruited Blackpool as a case study partner who I have been formulating the approach with, aiming to address; the urgent need to assess indirect emissions, the lack of internal capacity within authorities to handle their own whole-footprint emissions outside of the dedicated environmental team and the need for increased carbon/climate literacy.

I'll be finishing over the coming months and have just finished rounds of PhD interviews for an October start. I am hoping to get a scholarship in UEA to work on a climate litigation project focussed on scalable findings that can accelerate climate mitigation.

#### 3. What's your career highlight to date and / or who has most inspired you?

I think receiving the best dissertation in LEC 2020 and the class prize for Natural Sciences was a real highlight, it was amazing to get such recognition! But ultimately getting paid to continue with research that could have real impact in enabling decarbonisation is the continuing highlight, I don't have to compromise my values to earn money and I am working towards solutions which is hopeful.

#### 4. Who are the people who have inspired you most in your career to date?

I was inspired to properly pursue academia and aspire to PhD study (and beyond) around 5 years ago by Sylvia Earle, she is a pioneering woman in science but also a brilliant oceanographer and a passionate voice for the ocean. I love how she speaks about the world and the work she does, it made me realise



that I could do that to, that I was passionate and determined enough to pursue research and advocate for the natural world like her.

I've also felt inspired by the economists Elinor Ostrom and Mariana Mazzucato, again as pioneering women in academia, but also for their impact on how we see ourselves, especially Elinor Ostrom's work on the tragedy of the commons. There are so many more, I actually have a list on my wall of women who've inspired me, but male writers like Tim Jackson, Carl Sagan and Richard Dawkins have all made me want to do science and work towards a sustainable future as well. Also my supervisor AJ has been great to work with and I've been continually inspired by our conversations over the last 4 years.

## 5. Finally, what does sustainability mean to you, or why do you feel it's so important?

Sustainability is our ability to thrive within the limitations of the earth system. It touches all areas of our existence and forces us to ask fundamental questions about the world we want to live in and how we will create it. We are close to irrevocably crossing significant earth system boundaries including climate change and ecological collapse (mass extinction), nothing less than the whole-sale transformation of society is required to re-orient ourselves towards a different future. This includes thinking about how rich we want to be, how generous we are, what 'enough' is and how we will (quickly) formulate a different relationship with nature. The issues facing us are as much about social justice as environmental destruction and the task is fundamentally interdisciplinary.

# Dr Andongma Awawing, Senior Research Associate

#### 1. What's your role in LEC and what led you to the department?

I am a senior research associate

I joined LEC because I was offered an amazing opportunity to develop my career further in insect-microbial ecological research.

#### 2. Can you tell us a bit about your research / dissertation / job and why it's so important?

My research is focused on developing cost-effective, efficient and environmentally friendly strategies for managing insect pests with the help of their symbiotic bacteria.

We hope that, these new generation pest management strategies will eventually replace the use of conventional chemical pesticides which are detrimental to human health and the environment. I believe this is crucial in achieving the UN SDG to 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture' by 2030

#### 3. What's your career highlight to date and / or who has most inspired you?

Working on insect symbiotic relations for more than 10 years has accorded me the opportunity collaborate and be part of multi-national projects which have created global impact. I am also happy that I am able to leave behind footprints (publications) which will outlive me

An exciting career highlight was when I contributed to technology and knowledge transfer by organising workshops to train local farmers on insect pests and their management.



#### 4. Who are the people who have inspired you most in your career to date?

I am privileged to have had an array of exceptionally talented mentors and leading scientists across different continents which have not only nurtured my career but always inspire me to aspire for more; these include Prof D. Obeng-ofori (University of Ghana) Prof Chang-ying (HZAU, China), Prof Anthony Clarke (QUT Australia), Dr Miranda walker and Prof Paul Dyson (Swansea University medical school UK) and Prof Ken Wilson at LEC UK. Their contributions in diverse ways as brought me this far and I will remain or ever grateful

5. Finally, what does sustainability mean to you, or why do you feel it's so important?

Leaving the world a better place for future generations

# **Dr Ali Birkett, Research Promotion Coordinator**

# 1. What's your role in LEC and what led you to the department?

I came to LEC in July 2009 as a voluntary research assistant to one of the then PhD students, now technician, Dr Annabel Rice. Having done my MSc, I was living back with my parents in Preston while seeking ecology research experience as I began applying for PhDs (including a period working at Blackpool Zoo!) and got talking to Prof Ken Wilson on a postgraduate open day. He suggested Annabel, one of his and Dr Rosa Menendez's students, could offer me voluntary field and lab work on her butterfly research project, and I've basically been hanging around ever since!

While I've been here I've done lots of different research work from being a research technician on several different projects, to my own PhD on British dung beetles and then a postdoctoral research associate position on a complex plant-soil interactions project. Throughout it all though, I took every opportunity to continue to develop science communication skills and experience: to me science findings belong in conversation, not on a pdf in a dusty filing cabinet. This included helping out with Carly Stevens' Science Hunters project engaging children with science through the global computer game Minecraft and public engagement training from the British Ecological Society, which led to joining Dr Emma Sayer's FestivalBugs project. FestivalBugs has brought the privilege of talking about dung beetles at the massive Glastonbury Festival, proving you really never know where studying science will take you!

When my postdoc position came to an end, my current job was advertised on a 7-month secondment cover basis starting in spring 2017. The job – now titled Research Promotion Coordinator – involved no hands-on research but instead supporting other researchers in the department in various aspects, including helping to publicise their successes and findings. At that point was feeling uncertain about my place in hands-on research and so I thought this short-term role would be a great way for me to try out science communication and events management etc as an alternative route. And oh my, am I glad I took that chance!

Looking back now I realise for just how many years I'd been feeling unsettled in the realm of hands-on research: I'd never found that necessary ability to turn my curiosity for the natural world into practical research ideas and it didn't seem to be a skill I could learn. Now though I work in a job where wide-eyed curiosity for anything and everything is an asset, and where my biggest problems come from having so many ideas I'd need to clone myself many times to get everything done!



I'm very grateful I've had the opportunity to experience the research world from the inside as it has definitely given me a crucial understanding of the needs, challenges and objectives of the researchers I support, and I'm also very grateful to my colleagues here in LEC for their patience while I teach myself all the new skills involved in my new career path. I still feel like an apprentice with lots to learn, and I love it!

## 2. Can you tell us a bit about your research / dissertation / job and why it's so important?

Being Research Promotion Coordinator has always involved many different things. My diary for this week, for instance, includes being secretary for a departmental committee, contributing to a steering group that's preparing a research conference, working with the university's Press Office to promote a news story, editing some video for YouTube, managing three of the department's social media platforms, helping our postgraduate researchers to plan a programme of public science engagement events, making changes to content on LEC's website, and sharing news of opportunities with colleagues by email. Recently though, acting as coordinator for the department's Sustainability Group has also come under my responsibilities.

LEC's Sustainability Group is a diverse team of researchers, non-academic staff and students who are working together to enhance the environmental sustainability of the department and its community of staff, students and partners. Essentially, we recognise that many of our current practices are not in line with addressing the climate and ecological emergency, and we seek to instigate change in this as soon as possible. The group was established in 2017 by Prof Jess Davies to engage with the wider institution on University sustainability and act as a forum and platform for debate on sustainability issues, as well as looking at our own internal policies and practices with an honest and critical eye. Our biggest achievements to date have been to embed a series of sustainability commitments into departmental policy, to be integral to the University's declaration of a climate emergency through the leadership and hard work of Dr Emily Heath and student Millie Prosser, and the adoption into University procurement procedures of our 'travel decision tree' developed by Dr Rachel Marshall and UKCEH's Dr Sam Harrison and others. There's still lots to do and it's my honour to take on the administerial coordination, facilitating collaborations and supporting group members in the use of their interests and expertise to develop initiatives and take action.

#### 3. What's your career highlight to date and / or who has most inspired you?

The day I found I'd been accepted onto my PhD project. It was summer 2010 and I'd been notified by email from Rosa, with who I'd co-written the project proposal. I spent the day exploring a botanical garden with my parents and I just kept whispering: 'I'm going to be an ecologist!' with a huge smile on my face! Even though I've since discovered the hands-on research route isn't the career for me, I'll never forget that feeling of achieving the dream I'd been working towards since I was 14. I was 25.

Then in what has turned out to be my new direction, I rounded off my first week sharing my fascination and passion for ecology, science and the natural world with Glastonbury festival-goers standing in front of the world famous Pyramid Stage singing along to The Who performing at sunset under blue skies. What a privilege! And yes, I will continue to tell anyone and everyone about it at every chance I get!



#### 4. Who are the people who have inspired you most in your career to date?

On a personal level I'm particularly inspired by two characteristics in people: those that have the bravery to step away from societal expectations in order to be true to themselves, and those that have a passion and fascination for discovery in whatever subject. When you see someone's eyes light up when they talk about something they do and believe in, how can you not be inspired?!

I'm also absolutely fascinated by the Arctic, by storytelling, and by photography, so I'm extremely inspired by Esther Horvath. She is Hungarian, and after the fall of the 'iron curtain' she packed up two suitcases, gave up her successful business, and moved to New York to follow her dream to become a photographer. 'Before every big decision in my life I ask my 85-year-old me for advice... I didn't know if I would make it, if I would really become the photographer I had dreamed of, but I knew if I didn't take this chance I would never have an answer and I would only regret it by the time I reach 85. Today, after 10 years of hard work, challenging times and many gifts from the universe, I'm grateful that my 85-year-old self pushed me to be brave and follow my dreams.'

Esther has achieved her dream, and is now photographer for the Alfred Wegener Institute, Helmholtz-Center for Polar and Marine Research (AWI) in Germany. She documents scientific expeditions, telling the story of the climate and polar scientists recording the impacts of climate change in these most fragile environments. Her photographs and drawings are fascinating (if you're on Instagram have a look: @estherhorvath) and she hopes through them that she can change how people understand the current realities of the changing climate. I recommend her TEDx talk 'Journey to Polar Night' where she tells her own story of her experience on the largest expedition in the Arctic Ocean, the MOSAiC expedition.

What is your 85-year-old self advising you to do?

#### 5. Finally, what does sustainability mean to you, or why do you feel it's so important?

From a department point of view I think taking action to address our own sustainability weaknesses is really important as we need to put our own research into action here on our own doorstep. 'Put our actions where our research is' you could say! We're also in brilliant position to be able to share honestly about our experiences of trying to change as we've so many experts of different fields working together, and have so many collaborating organisations and students to partner with on the journey and learn alongside.

# **Dr Annette Ryan, Head of Technical services**

# 1. What's your role in LEC and what led you to the department?

I am the head of LEC Technical Services and Facilities and the Departmental Safety Officer. I loved the collegiality and community that was apparent at the open day I attended when I was deciding where to continue studying after returning from working abroad. That support and sense of community continued all through my Masters, PhD and post doc positions so when an opportunity for an indefinite post within the technical team arose in 2013, I went for it. I've now been with LEC for over 16 years.



#### 2. Can you tell us a bit about your research / dissertation / job and why it's so important?

As Head of LEC Technical Services, I lead a team of 22 technicians. As well as ensuring the team supports teaching and research to the best of its ability and has the resources and time to do this, it is my responsibility and duty to support the wellbeing of the technical staff in LEC, and promote career and personal development opportunities for those staff as far as possible. As the head of one of the largest teams of lab-based technicians, and a member of the University steering group on Technicians career pathways, I have the experience and opportunity to influence University policy on how it recognises and values technical staff.

#### 3. What's your career highlight to date and / or who has most inspired you?

There are many people who inspire me for different reasons. People who are able to remain calm and professional in all sorts of different and difficult situations like our head of department, people who take the lead and invest time and effort tackle inequality like the Athena Swan, EDI and Technicians Commitment leads and people who continue to work or train to achieve their goals despite injury, disability or prejudice like Michelle Obama, Katherine Johnson, Marcus Rashford and Kelly Homes.

My career highlight to date has been winning the LEC Colleague of the Year Award in 2018 and 2021. Individuals or teams are nominated for the award by colleagues and peers so these mean a huge amount to me.

#### 4. Who are the people who have inspired you most in your career to date?

To be honest, most of the staff in LEC have inspired me at one point or another! The way people in LEC support each other either by taking on additional duties, covering absences, leading teams or committees or simply taking the time to stop and chat and ask if you're ok. I find our head of department inspiring because of his leadership abilities and the knowledge he has to successfully manage such a large and complex department. He's always approachable, calm, professional and considered in his approach. I find the other building superintendents in FST inspiring because of the way they tackle problems and concerns and the support that they're willing to give outside of their areas. This was particularly important to me when I first started in this role and they were more than willing to help me find my feet and make me feel part of the team.

#### 5. Finally, what does sustainability mean to you, or why do you feel it's so important?

To me sustainability means protecting the world we live in by living within our means and resources and appreciating that everything and everyone is linked. It's about making conscious choices to reduce waste, reuse and recycle where possible, and minimise energy use and energy waste. It's not about stopping what you do necessarily, but it's doing or using things in moderation and considering all the options. It's important to me because I believe the environment we live in is fragile and if we break it, there's no going back. It's up to all of us as individuals to make changes to the things we have control over and to lead by example. Because if everyone did something small, and by our actions, we influence our friends and family to make small changes as well, then we end up with a big impact.

