

WUR from within: straight, sharp, transparent

No 09

# Resource

JANUARY 2024 VOLUME 18

The journalism platform for all at Wageningen University & Research

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Or is it?

**Bike path saga**  
close to end

**Farming in space as**  
student challenge

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## FOREWORD

### **Toilet**

'It's like a toilet: even if the door is only ajar, it still stinks.' It's not every issue of *Resource* where you see a quote like that highlighted in bold. The quote comes from our feature article about the advisory committee set up by the Executive Board to consider what conditions WUR should set for collaborations with the fossil-fuel industry. The committee presented its recommendations in December and *Resource* asked people for their comments (see page 14).

The research directors preferred to wait until the Executive Board has taken a decision before making their comments. But that raises a question, regardless of the content of the recommendations. Because Carolien Kroeze is chair of the advisory committee and will also be the new rector magnificus, and therefore a member of WUR's Executive Board, as of 10 March (see page 12). So will the board take its decision before 10 March? Or will it do so after the committee chair Kroeze has started her new job? Hopefully the case won't cause a stink, because this reminds me of the old Dutch advert for Duck toilet cleaner: 'We at Toilet Duck recommend using Toilet Duck'.

**Willem Andréé**  
Editor-in-chief







## DISCUSSION AND FUN

A discussion started on the intranet about the message 'Enjoy the ice, but respect the nature on campus'. The photo next to the message showed a sign saying: 'No skating!' Ridiculous, said some: international students and staff in particular should get a chance to enjoy the ice. But others thought it was good WUR was protecting the nature on campus. There was no disagreement about the joys of building snowmen and throwing snowballs, though. The *Resource* editor-in-chief bravely took this photo after begging: 'Don't throw them at me'. His appeal was ignored. <sup>WA</sup>

Photo *Resource*

## ABP is stopping... or is it?

The ABP pension fund is following the advice of WUR staff in phasing out investments linked to deforestation in Brazil. The pension fund wants to invest in more sustainable companies. But concerns remain.

ABP is a pension fund for people who work for the government or in education. The pension organization is regularly the target of criticism. In 2021 a number of critical WUR employees set up the group Grey Hair, Green Forests to campaign against ABP's investments in livestock farming and mining in Brazil.

The group has now joined forces with Fossil Free, which unites 13 campaign groups. They want ABP's investments to be 100 per cent sustainable. Ria Hulsman, region manager for Latin America and the Caribbean, represents WUR in discussions with ABP: 'The good news is that the investments in the meat companies Marfig and Minerva have been phased out. But ABP still invests in the Brazilian meat company JBS, so we still have some concerns.'

ABP has announced that it has reduced its fossil investments from 15 billion euros to 6 billion. The fund wants a maximum of 20 per cent of its revenue to come from fossil industry investments. Hulsman: 'But this is taking too long. In the short term, we advise ABP to stop investing cash in agri-industrial companies involved in fertilizers or chemical-synthetic crop protection agents.' *WA*



resource-online.nl

## End in sight to bike path saga

**Dassenbos wood on campus recently got 30 new trees, as compensation for the 14 trees that WUR felled without permission in January 2021. The new trees are the latest development in the seemingly never-ending saga of the construction of a new bike path between the Aurora building and Dijkgraaf.**

The Mooi Wageningen nature organization and the Noordwest district residents' association were not happy about the trees being felled. It turned out the trees were part of a wood that had been there for over 100 years and had to remain undisturbed. To complicate matters further, Gelderland provincial authority recently concluded the wood was not so old after all. That made it possible for the controversial bike path to go ahead.

### Decking

According to the WUR spokesperson, planting those trees marks the start of preparations for building the bike path. 'We have planted twice as many trees as we felled. Now we are waiting for the final permits.' A spokesperson from Wageningen municipality mentions other steps that still have to be taken. 'We need to finalize the design with WUR, after which we can issue an environmental and planning permit. The preparations after that will probably



Photo DG

take another year. The aim is to have the bike path finished in summer 2025.' The new bike path will be constructed on decking. This idea comes from WUR ecologist Wieger Wamelink, and will allow air and moisture to reach the soil. That will keep alive the fungi and bacteria that belong in old woodland soil. Because even if the province concluded the bicycle path will not be on old woodland soil, WUR still wants to restore the soil to its previous state. Students will evaluate the restoration over the next few years. WUR argues the controversial bike path is necessary. The space taken up by the current bike path south of the bus lane is needed to create an access route to the campus for WUR employees. That is why the bike path has to be moved to the north side. *DG/Arnold Winkels*



## Farming in space as student challenge

The ReThink Food Challenge will start in November. The participants will have to come up with innovations in food production drawing on research into farming on Mars. The challenge is inspired by ecologist Wieger Wamelink's research project 'Food for Mars and the Moon,' says Marta Eggers of WUR's Student Challenges team. 'The participating teams will be able to choose between three topics within space farming: indoor farming, bioprocessing and alternative sources of protein.' These topics are reminiscent of previous WUR challenges, such as the Urban Greenhouse Challenge, the ReThink Waste Challenge and the ReThink Protein Challenge. 'There is something of all these challenges in the new edition, but we are framing it with our focus on farming in space,' explains Eggers. As in previous Wageningen student challenges, students from anywhere in the world can take part. *municipality. LZ*

*Read more on resource-online.nl*



# -7.5°C

The lowest temperature in the three-day mini-winter last week was -7.5°C, measured at night in Veenkampen, WUR's weather station. Rutger Dankers, a Climate Impact researcher in Wageningen Environmental Research's Climate Resilience team, reported it on LinkedIn. Cold? 'Between 1991 and 2020, an average of 9.9 days per year were recorded in De Bilt (the main Dutch weather station) with minimum temperatures below -5°C,' he says. 'That figure was even 13 days between 1981 and 2010.' <sup>ME</sup>

## Carolien Kroeze is new rector

WUR professor of Environmental Systems Analysis Carolien Kroeze will succeed Arthur Mol as the new rector magnificus in March. She has worked in the Environmental Systems Analysis group since 1995 and became a personal professor there in 2010. In 2016 she became the Water Systems and Global Change chair holder and 18 months ago she got the Environmental Systems Analysis chair. The two groups merged at the start of this year. Kroeze was due to head up this new group jointly with Fulco Ludwig. It is not yet known who will take over her position. Kroeze studied environmental science at Groningen and got her PhD at the University of Amsterdam. As well as a professor, she is also the director of the WIMEK graduate school, so WIMEK will need to find a new director. Kroeze doesn't want to be interviewed until she starts officially (on 9 March, *Dies Natalis*). <sup>RK</sup>

*Lead reactions to her appointment on p.12*

## Fossil collaboration advice: 'No silver bullet'

**Shortly before the Christmas holidays, the committee appointed to advise WUR on collaboration with fossil-fuel companies proposed a decision framework. It recommends three criteria for assessing potential partners.**

Wageningen saw fierce protests last year against the university's connections with fossil industry companies. In response, the Executive Board set up an advisory committee tasked with establishing criteria for new collaborations with fossil companies.

**A new advisory committee will evaluate in case of doubt**

the project in line with WUR's mission? The second is an assessment of the potential partner: is it a company in the fossil industry, has the company made

The decision framework proposed by the committee has three steps. The first is a general assessment: is



Photo Khamkeo Vilaysing-Unsplash

a commitment to the Paris Agreement, is it actively phasing out its fossil-fuel operations, does it obstruct climate policies? In addition, the partner must not be responsible for the research objectives (that is WUR's task) and its financial contribution must not exceed 30 per cent of the project budget. The third step applies if doubts or objections are raised in the first two steps. Then what is termed a 'reflective report' has to be drawn up showing why the collaboration is of

strategic importance to WUR despite the doubts. A new advisory committee, which is still to be set up, will then evaluate the proposed collaboration.

The recommendations, which will not be binding, will be published in an annual report. <sup>SS</sup>

*Read more about the advice and comments, including from committee chair Carolien Kroeze, on p.14*

# Pilot with takeaway containers

Starting this week, the caterer Compass is testing a system with takeaway containers for meals from the Forum and Orion restaurants. *Resource* gave it a try.

Before you are allowed to take away your meal, you first have to install an app, create an account and add your personal payment details. You can use the container system (of the Vytal brand) free of charge but you get a fine if you return the

## The containers are free but you get a fine for late returns

container too late or not at all. A bit like the library in the past where you got charged for every day your book was overdue.

When you scan the QR code on the lid, the app records the container you want to borrow: each container has its own unique code. When you pay for your meal at the cash desk, you show the scan in the app. You also have to tell the cashier what you have put in the container,

because they can't tell from the opaque lid.

The tray in the restaurant where you return your container is supposed to have a return sticker with a QR code that you scan when handing your container back. That was still missing in the Orion restaurant when this issue of *Resource* was printed. 'Chuck the container in the tray,' said the cook. 'We scan all the containers at the end of the day and then you'll get confirmation you handed it back in the app.' And we did.

## Bonus

Hardly any use was made of the Vytal containers in the first week. The four-month pilot is intended to show how much demand there is for this service and what people's experiences are. A bonus if you buy a soup is that more fits in the takeaway container than in the standard ceramic bowls. It all adds up! DV



# Album sleeve wins Cover Prize

Scientist Max Finger-Bou paid homage to his musical hero with the cover of his PhD thesis. It won him the 2023 *Resource* Cover Prize. That was mainly thanks to the jury.



This year's jury consisted of outgoing rector Arthur Mol, Forum Special Collections curator Anneke Groen, creative DTP expert Alfred Heikamp, beadle Renata Michel and

PhD candidate Chrysanthi Pachoulide of the Wageningen PhD Network.

'This cover intrigues you and makes you look again,' says Groen, describing the winning cover. 'The saxophone is wonderful and it adds a personal touch to the science. I like that. It encourages you to read the thesis.' 'I'm a fan of Coltrane too,' says Heikamp, although he didn't actually have

**'The saxophone is wonderful and adds a personal touch to the science'**

Finger-Bou at the top of his list. Finger-Bou's

thesis *Giant Steps* is about the production of proteins in bacteria. *Giant Steps* is also the title of an album by saxophonist John Coltrane. But giant steps in science are rare and Finger-Bou's research was no exception in that regard. He pokes fun at his own modest achievements by making the dot on the 'i' in *Giant* say 'not so'. Lette Hogeling's colourful cover got the most votes online from the general public. She had a stylized sun for her thesis on how to get vulnerable families to adopt a more healthy diet. 'In terms of design hers was the best,' says Heikamp. 'But it wasn't clear to me what the illustration was trying to say.' That lack of clarity was probably why Hogeling did not score so well with the jury. RK

# Puzzling science

What do dogs understand about human knowledge? That is the central question in the PhD research of Jori Noordenbos (Behavioural Ecology). To answer it, dozens of dogs are performing puzzles in Carus.

Dogs are champions in ‘understanding’ people. They soon figure out what people mean by certain instructions, they are often better at reading our body language than we are, and they can even work out whether a human can see a certain object. But perhaps dogs are capable of much more, wondered behavioural ecologist Noordenbos. Is their social cognition so well developed that they know what people know? More specifically, are they able to work out which people have the knowledge to solve a certain problem and which people don’t?

To answer this question, she developed an animal-friendly behavioural study. In the Carus canine lab, a place full of cameras and a one-way mirror like in police interrogation rooms, the dogs have to solve two puzzles where they use their snout to move components about and ‘unlock’ a treat. Nearly every dog can solve this puzzle on its own after a short introduction.

## Eye contact

After the dogs have completed the puzzle successfully a few times, Noordenbos looks at what they do with a sabotaged version, where there’s no way to unlock the treat. Who do they go to for help? Is that the person the dog saw putting the treat in the puzzle (who therefore must know how to get

the treat out again)? Is it their owner? Or is it a third person standing next to the experimental setup? Is there a pattern?

Noordenbos has taken precautions to avoid the ‘Clever Hans’ effect — named after a horse that was supposed to be able to count but in fact responded to tiny changes in a person’s expression. The person in charge of the puzzle and the observer get strict instructions

## Who does the dog look at for help?

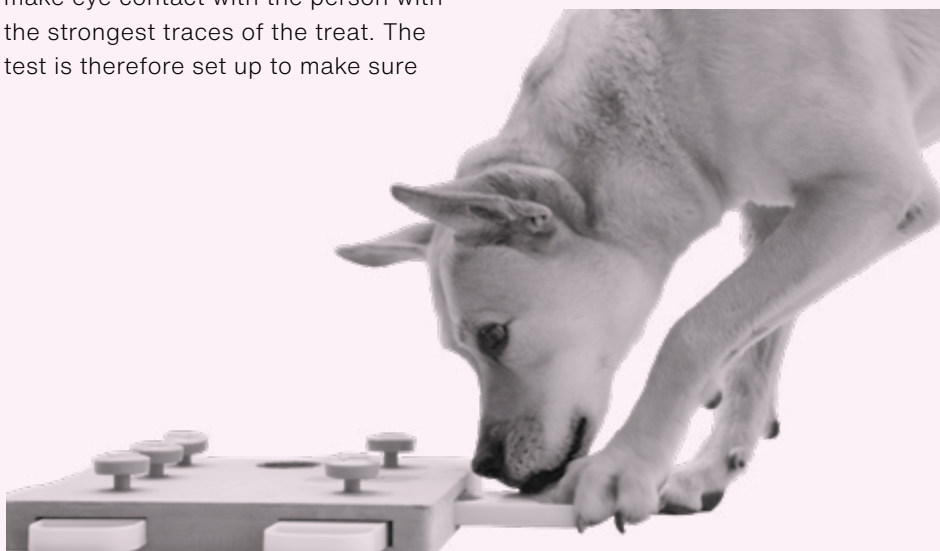
about where to look and their body language while the dog is doing the puzzle. Also, during the test the dog’s owner sits behind it out of sight. On top of this, Noordenbos has included a check to minimize the influence of smells. Given what a good sense of smell dogs have, they might prefer to make eye contact with the person with the strongest traces of the treat. The test is therefore set up to make sure

the observer and the person in charge of the puzzle both have the treat in their hands for an equal amount of time.

## No hard taskmasters

Noordenbos’s study also takes into account the owner’s style of training and caring for the dog. She assesses this in a questionnaire for the participants. After all, perhaps dogs with strict owners prefer to make eye contact anyway with someone other than their owner. But she hasn’t come across any really hard taskmasters, says Noordenbos, who is doing this PhD research alongside her job as a research assistant in the Behavioural Ecology group. ‘People volunteer for the study so there is an inherent bias in the kind of participant.’

Noordenbos and her team — various students are helping her — have conducted about 80 tests to date (see Resource’s Instagram video). There is still room for more participants. Interested dog owners can apply via [dierenonderzoek.nl](https://dierenonderzoek.nl). ME



Jori Noordenbos is using dog puzzles to study canine social cognition • Photo Shutterstock

## [Live&Learn]

**A botched experiment, a rejected paper: such things are soon labelled as failures in academia. As for talking about them — not done! But that is just what WUR scientists do in this column. Because failure has its uses. This time, we hear from **Alejandro Parodi Parodi**, a postdoc in Farming Systems Ecology.** Text & Illustration Stijn Schreven

‘During my PhD, I studied the sustainability of farming black soldier fly larvae for feed and food. I wanted to know how much ammonia and greenhouse gases the larvae emit. To find this out, I reared the larvae in the respiration chambers at Carus, the experimental animal facility on campus. I could only use the chambers for a few weeks, so there was little room for mistakes. Moreover, my colleagues at Carus emphasized that I should be careful working with the high-grade equipment.

The two respiration chambers were metal containers the size of kitchen ovens, with a transparent lid on top. In each chamber, I stacked three crates with feed and ten thousand larvae the size of a rice grain. I carefully set up the first trial, sealed the chambers and left the lab as tidy as possible.

The next day, I looked through the lid. What had happened here? Thousands of larvae had escaped from the crates and were crawling everywhere inside the chambers. It was a mess. With a background in ecology and conservation, I had only done research in nature, where

you have little control over anything. At Carus I was working with sealed, climate-controlled chambers, so I assumed nothing could go wrong. When it did, my many insecurities as a starting PhD student came out: maybe I wasn't good enough, I would fail, or disappoint others.

**‘Thousands of larvae had escaped from the crates and were crawling everywhere inside the chambers’**

But when I told my supervisors what happened, they were able to laugh about it. I shouldn't worry so much because these things happen. That helped me put things into perspective. In the following days, I solved the problem and successfully conducted the experiment after all. Looking back, it is fine to have expectations and healthy to worry when things work out differently. But worrying too much doesn't help deal with an adversity once you see it ahead.’



## Rarity is inevitable

**Most species by far are rare in nature. That is not surprising when you look at the maths, shows an article by Egbert van Nes and Marten Scheffer (both Aquatic Ecology) among others. Rarity is a ‘sticky condition’ that it is difficult to escape from.**

The researchers started by working out for various organisms how many species account for half the biomass. That is usually just a few per cent of all the available species. ‘This applies not just to the trees in the Amazon,’ says Scheffer, ‘but also to the bacteria in our intestines, fungi in woods, birds, plankton and so on. A few species are hyperdominant and the rest are rare.’

### Elite

Why is that? Are the dominant species superior? Not necessarily, say Scheffer and his team. A simple mathematical model shows that rarity and dominance are inevitable, even when all the species in competition with one another are equally strong. Random chance plays a major role. According

**‘A few species are hyperdominant and the rest are rare’**

to the model, today's dominant species could even be ‘chance elites’.

Their dominance could easily be undone if the circumstances are

right. ‘You don't necessarily see the “most adapted” species occupying a niche that has become available,’ says Scheffer. ‘Instead you see a random species within the group of species that fulfil the same function within the ecosystem.’

According to the researchers, that jockeying for position is also why rare species are so important. They form the substitute bench for when problems arise and a replacement needs to take over the function of a previously dominant species. Scheffer: ‘They aren't superfluous; they provide stability in the functioning of the community.’ RK





Hester Biemans looks at the impact of melting ice in the Karakoram (photo), Hindu Kush and Himalayas on agriculture • Photo Shutterstock

## Melting glaciers — how bad is that?

**The glaciers in the Himalayas will mostly have melted by the end of the present century. Hester Biemans has an ERC Consolidator grant to investigate the consequences these melting glaciers will have for agriculture.**

Those consequences could be huge. The ice packs of the Himalayas, Karakoram and Hindu Kush, also known as the natural water towers of Asia, feed 12 major rivers. Two billion people live in the drainage basins, with much of the world's food being grown there. Biemans says the area accounts for a third of global rice production and a quarter of global wheat production. Agriculture there depends heavily on irrigation and the melting glaciers will affect the availability of water. Biemans: 'My question is how climate change will affect the water used in agriculture. It can lead to both water shortages, with droughts, and an excess of water, with flooding. I want to use a detailed model to get a picture of this.'

### Spatial model

'Climate change will alter the rivers' discharge patterns,' explains Biemans. 'You can see that here with the Rhine, which is also a meltwater river. The big difference with Asia is that the rivers there are connected to an extensive irrigation system. Several crops are grown each year. The whole farm system is geared to when the water arrives.'

'Firstly, I want to assess the importance of the water stored in the form of snow and glaciers,' she continues. 'What is the extent of the water from the mountains and what happens if the melting

pattern changes? It is sometimes suggested that the lives of two billion people depend on that water, but that is not the case. The farms use rainwater and groundwater as well as the meltwater.' The model Biemans is developing will describe all the water flows. Biemans: 'It is a spatial model that gives the origin of every litre of irrigation water. If you know the risks for the availability of water depending on its origins, you can make plans for adaptation. For example, you could store or filter in more water, or you could cut water consumption.'

Changes in the use of the land are another possibility. 'You could

### **'I want to assess the importance of the water stored in the form of snow and glaciers'**

decide to stop growing certain crops, or grow them at a different point in the season. If the meltwater peak is earlier than in the past, there may no longer be water available when that particular crop needs it. The

model can perform these calculations and show the consequences of a given choice.'

This is about customized solutions. Biemans thinks the impact of the melting glaciers will be different for each of the 12 drainage basins. A lot of data is needed for all those calculations, not just on water flows but also on the crops that are grown, the growing seasons and the use of irrigation water for crop cultivation. <sup>RK</sup>

## PhD theses **in a nutshell**

### Imaging the stomach

The digestion of proteins in the stomach depends on various factors. Elise van Eijnatten used MRI (magnetic resonance) technology to get a picture – literally – of how it works. She then compared this with analyses of blood samples, which show how much protein is broken down into amino acids. One of the things she demonstrated was that breast milk passes through the stomach faster than infant formula. The images also show whether proteins clump together and how that affects the speed at which food passes through the stomach. Turns out it doesn't, but 'the bigger picture' is complex. <sup>RK</sup>

*The Bigger Picture.* Elise van Eijnatten ◀ Supervisor Kees de Graaf

### Circular? Less livestock!

It's a familiar message: a circular food system means drastically reducing livestock numbers. Benjamin van Selm (from New Zealand) has developed a model for calculating the effects of circular measures on land use and greenhouse gas emissions. Circular primarily means no longer sourcing livestock feed from faraway countries. On that basis, only a small national herd is viable. The model shows that this would almost be enough to achieve the 2030 emission targets. <sup>RK</sup>

*Exploring future scenarios for more circular food systems.*

Benjamin van Selm ◀ Supervisors Imke de Boer and Martin van Ittersum

### Designing proteins

The days when only nature 'thought up' proteins are long gone. Humans are increasingly capable of designing the proteins they want. Robbert de Haas shows what is possible in this field and which techniques are 'state of the art'. Like deep learning: getting a computer to use known proteins to make predictions about how new proteins will behave. For example, De Haas shows how you can make protein packaging on a nano scale for getting vaccines to their destination. <sup>RK</sup>

*Exploring protein landscapes.*

Robbert de Haas ◀ Supervisor Renko de Vries

## THE PROPOSITION

PhD researchers talk about their most thought-provoking proposition. This time it's the turn of Gijs Vreeke, who will get a PhD on 23 January for his analysis of proteins and peptides and how to monitor digestion of them better.



'Every human needs to learn how to perform cardiopulmonary resuscitation (CPR) in school.'

'I worked as a lifeguard on the beach for 10 years, and I learned how to perform CPR. I never had to do it myself on the beach but it happens on a Dutch beach somewhere every year. Two years ago, I was mountain-biking with a friend near Rhenen when I saw an accident happen. A motorcyclist smashed into a tree at 120 kilometres per hour. A young guy in his mid-twenties. My friend and two friends of his stood there, frozen. Luckily, I knew what to do. Phone the emergency services and start resuscitating. It was so good to be able to do something at that moment. Not

that you can blame anyone for if they can't, of course, but it did make clear to me how horrible it is if you can't. I hope that in future everyone will learn how to resuscitate, and school is the best place to do that. After practising a couple of times, you can manage. Sadly, that young man didn't make it. When the police came, they took over from me, but it was already too late.' <sup>TS</sup>

# Expectations



**Joshua Wambugu**

A toast to the new year that has ushered us back on campus. As memories of 2023 fade, there were many highlights that WUR and its community can be proud of. However, there are still many pending agenda items and potential milestones to achieve in 2024. We may all have our expectations, but what does 2024 bring and what should change for the WUR community?

First, congratulations to the new rector Carolien Kroeze. Her appointment guarantees continuity and I'm sure many are curious about her plans for her four-year term, which starts in March.

**'Diversity, inclusion and the decolonization of education should be part of the Strategic Plan'**

meals at the campus catering outlets. It's completely bizarre to buy a meal for over seven euros. Yes, the current economic situation might be different compared to a couple of years ago; however, there is a need to have an acceptable equilibrium. Thirdly, conversations around the decolonization of education, diversity

Secondly, sustainability shouldn't cost all our savings. I am thinking in particular of the skyrocketing prices for

and inclusion need to scale up into more cohesive actions. Importantly, they shouldn't just be topics of discussion but also well-integrated themes and values in the new Strategic Plan for 2025-2028.

Fourthly, there is a need for more campaigns and outreach to advocate for mental health, well-being and social safety for all in the WUR community.

Finally, with the new caterer in the educational buildings, the closure timings have been affected. That is the case with The Spot in Orion where on Fridays, the location now closes at 17:30. It simply sounds like gently being forced to 'go home', and you can't enjoy a beer, soft drink or a meal. The Spot concept is supposed to be for the students and staff. The front cover of the beer menu is inviting and flashy with the title 'King of Beer'. That's how Fridays need to feel like, inviting you to relax after the week-long stress or joy. So closing time should be the same as on other days, namely at 19:30.

Hopeful by now you've been able to toast to a healthy and productive year with your colleagues at a department high tea or drinks event. But it is never too late to wish the reader a Happy New Year.

Joshua Wambugu (40), from Kenya, is a PhD candidate in the Marine Animal Ecology and Environmental Policy groups. He is a Social Safety Guide with the DARE Project and a member of the project's coordinating team. He loves cooking, hiking and birdwatching.





## WUR gets a new rector

# 'Carolien Kroeze is the right person for the job'

The successor to rector magnificus Arthur Mol, Carolien Kroeze, starts on 10 March. She says it's too soon for an interview in *Resource*. So we asked people who know her to give us some idea of her. Text *Resource* editors



'She is aware of what's going on in WUR'

Blair van Pelt, WUR Council chair and senior university lecturer, Farming Systems Ecology

'Carolien has a calm presence and demonstrates an in-depth and nuanced awareness of topics, such as the fossil fuel collaboration issues and the implementation of the new Academic Career Framework. I think she is well aware of what's going on in WUR and she has a solid CV. I am looking forward to working with her as chair of the WUR Council on topics like Recognition & Rewards, and I hope she will guide us in the culture shift that is needed. I also look forward to seeing what her leadership style will be like in terms of how we as an institution position ourselves and take a leading role in relation to climate change and biodiversity loss. I think she is the right person for the job.' <sup>WA</sup>

'Carolien has a good eye for the quality of a degree programme'

Rik Leemans, professor of Environmental Systems Analysis

'It's terrific for Wageningen to have a woman in this position for the first time. I think she is highly capable of the job. I've known Carolien for 35 years, since we both worked for the public health institute RIVM. In 2003, I became full professor at Environmental Systems Analysis and therefore her line manager. She worked very independently on her topics of water quality and global river systems, in which she was innovative and groundbreaking. Carolien is a very good communicator and has a good eye for the quality of the education programme, particularly of our thesis students and PhD researchers. She is also good at



taking an integral approach to problems. She is a good fit with the university's motto: science for impact. That principle, established by her forerunners, needs an even stronger impulse. Make sure the big societal issues, both national (nitrogen) and international (biodiversity and the climate), are tackled integrally. It is also very important to anchor the new tenure track system firmly in the organization. And that staff feel they get a fair chance to advance their careers. I know Carolien is an inspiration to her students. I think she can be the same for the staff.' <sup>RK</sup>

## 'She will look for connections rather than confrontation'

Richard Marijnissen, postdoc in Ecosystem Services at Deltares, got his PhD in 2021 for research on the combined functions of surge barriers, with Kroeze as his supervisor

'As my supervisor, Carolien helped me get to the essence of the subject. My topic was somewhat outside her area of expertise, but that actually created a nice dynamic: I mainly discussed my academic training and personal development with her. How does your research fit with the bigger picture, what about scaling up, are you taking climate change into account sufficiently? These are typical of the kind of questions Carolien asks. Of course she had her personal views but that was never the focus: she encouraged me to develop my own viewpoint. A fellow PhD student once described her as "my



academic mother" and I find that quite a good description. Carolien keeps you on your toes but she's approachable and down to earth — she's not in an academic ivory tower. She is also not the kind of scientist who makes controversial statements to get things moving. My expectation is that as the rector magnificus, she'll look for connections rather than confrontation.' ME



## 'She's a good listener'

Wijnand Fredriks, chair of the Student Council

'Nice that Carolien Kroeze will be the new rector. She will be Wageningen's first woman rector. The Student Council met her during the selection process. She is capable, experienced and a good listener. Her way of talking is clearly informed and nuanced, so she makes a constructive impression. The rector magnificus is the person in the university management team who is responsible for student affairs. So in general, we think a rector should be close to students, and should be approachable with an open attitude. We hope Kroeze will prioritize student wellbeing, and maintaining educational standards and innovation.' LZ

## 'She is systematic, organized and takes informed decisions'

Theo Jetten, secretary of the PE&RC graduate school

'I know Carolien from the Recognition & Rewards committee and through the WIMEK graduate school, of which she is the director. She was also the chair of a number of BACs (appointment advisory committees for professors, ed.), of which I was the secretary. Carolien excels at connecting



people and chairing meetings, and is open to everyone's ideas. She doesn't seek the limelight but does always make a clear contribution. For the job she's going to do, it's a big plus that she knows all the ins and outs and the discussions around Recognition & Rewards. She is systematic, organized and takes informed decisions. I wouldn't expect big disruptive steps of her. She builds things up carefully. The position of science in society is changing. Her biggest challenge, in my view, lies in encouraging Wageningen science and scientists

to get on board with this, without harming the current high quality of our research and education. That means that from our various scientific angles, WUR should make itself heard more on specific societal issues. Recognition & Rewards keys into that too. As rector, she should take that further and expand it.' RK

## Cautious enthusiasm for recommendations on fossil collaboration

# ‘A tentative step in the right direction’

Is it still acceptable to collaborate with a fossil fuel player like Shell? Yes, says WUR, but only on certain conditions. An advisory committee appointed by the Executive Board presented those conditions to the board in mid-December (see page 4). *Resource* gauges how the recommendations are being received.

Text Steven Snijders

**A** debate arose last year in Wageningen, as it has elsewhere, about the links between the university and the fossil fuel industry. So in July, the Executive Board decided to appoint an advisory group to draw up criteria for entering into new collaborations, in the first instance with fossil-fuel companies. The recommendations were published in December, and consisted of a decision framework with three steps. The first is an overall assessment of whether the project aligns with the WUR mission. The second step is to assess the collaboration partner: is it fossil-fuel-based, how committed is it to the Paris Agreement, are we sure it doesn't actively undermine climate policies? And lastly, WUR must be responsible for the research objectives

## ‘IT’S LIKE A TOILET: EVEN IF THE DOOR IS ONLY AJAR, IT STILL STINKS’

and the partner should not contribute more than 30 per cent of the funding (see also page 4). The third step is a reflective report by an evaluation committee, to be appointed soon. ‘This decision framework is not a silver bullet,’ says Carolien Kroeze, chair of the advisory group and from 10 March rector magnificus at WUR. ‘There will always be wicked dilemmas.’ But Kroeze does think the formulation of the recommendations over recent months has raised awareness. ‘Colleagues are asking themselves: Does this collaboration still fit the bill?’ The only student in the nine-strong advisory group, Kristina Smieskova, saw herself as the most critical committee member. ‘It was a challenge to include all WUR viewpoints and still be ambitious,’ says Smieskova. Geert Aarts, a marine mammal researcher who is also in the group: ‘To me, the

chief benefit of the decision framework is that we’ve clarified the dilemmas on paper. Everyone who reads it will become aware of them. So in future, when a proposal comes in for a project with a fossil-fuel party, there will be a discussion. And the arguments will be written down.’ Likewise, for Martijn Duineveld of the critical Scientists4Future group, the main advantage is that collaboration with such partners will no longer be a matter of course. Duineveld: ‘Now you’ve got to take a position on things you used to overlook. You become aware of the negative side-effects of a project that might seem very positive in itself.’

### Political

The advisory group's recommendations have had a mixed reception among WUR scientists. Karen de Greef, a researcher in Breeding and Genomics at Wageningen Livestock Research, is glad that the decision framework leaves some room for fossil-fuel collaboration.



‘We are working for society as a whole, and I think we must continue to do so. We mustn’t make our work too political. It’s okay for us to tackle controversial issues, as long as we don’t let ourselves be used by any lobbies.’

Janjo de Haan, a researcher in Soil, Water and Fertilization at Wageningen Plant Research, has done research with Shell in the past. He is bothered about the procedural approach proposed by the group: ‘I predict that we’ll largely go on doing what we were already doing, but now with a bigger burden of administration. What we really need is a change of culture in the organization. Then you don’t need this kind of administrative procedure, and the decision can be taken at lower echelons in the organization.’

### Close the door

Yuca Waarts, an economist at Wageningen Economic Research, has doubts about the scope of the framework. ‘I would reverse the starting point. Rather than reasoning from the project as your starting point, why not ask yourself: how can I have the biggest impact with my available time as a researcher? If I take on this project, what other possibilities will I pass up? That’s what management should aim at.’ Waarts also sees a problem with the conflicting interests of the research directors who should make the decision, according to the recommendations, as to whether a project goes ahead. ‘Make



Many see awareness about such collaborations as one positive effect of the advice.

♦ Illustration Valerie Geelen

the recommendations of the planned Evaluation Committee binding. Or get a research director from another group to look at the reflective assessment.’ End Fossil Occupy, an activist group that occupied part of the Forum in May 2023, will continue campaigning in 2024. ‘Overall, we see this as a tentative step in the right direction, but it will take a lot more than this to turn WUR into the critical and independent institute we need in the battle against climate change,’ says Noor (full name known to the editors) on the

group’s behalf. ‘We would also prefer to see a bigger role for a democratic organ such as the WUR Council.’

Scientists4Future is critical of the recommendations too, and wrote a letter with causes for concern (see resource-online). Associate professor Martijn Duineveld was a signatory to the letter. ‘Numerous doors are left open in the recommendation. Even with a minority investment, they are still at the table at WUR. By collaborating with the fossil industry, we legitimize them. That makes us jointly responsible for what they do. It’s like a toilet: even if the door is only ajar, it still stinks. Let’s close the door completely.’ The research directors do not wish to respond to the group’s recommendations in *Resource* yet, and will wait for the Executive Board to reach a decision on them. That will be soon, according to WUR spokesperson Jan-Willem Bol. ■

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**‘I PREDICT THAT WE’LL LARGELY GO ON DOING WHAT WE WERE ALREADY DOING, BUT NOW WITH A BIGGER BURDEN OF ADMINISTRATION’**







## HOME MATCH

Last weekend, Biology Master's student Steffie van der Peet (left) took part in the Track Cycling European Championships in Apeldoorn. She rode in the team sprint, sprint and keirin events (see photo). In the team sprint, she and her two teammates won bronze. 'It was really great to be competing in front of a home crowd,' says an enthusiastic Van der Peet. With two Nations Cups to come, the team sprint team are in with a chance of qualifying to compete in the Olympic Games in Paris in August. DV

Photo Dyane Ribbink



# ‘We must do some serious soul-searching’

Emeritus professor Jan Douwe van der Ploeg has written a book that, according to the newspaper *Friesch Dagblad*, belongs on the new Minister of Agriculture’s bedside table and should be required reading for WUR’s Executive Board. It is an analysis of the failing Dutch nitrogen policy, in which he also tackles the thorny issue of his own university’s role. *Resource* asked him about the latter.

As professor of Rural Sociology, Van der Ploeg did research on modes of farming all around the world, with the contrast between ‘peasant farming’ and ‘entrepreneurial farming’ a recurring theme in his work. The former denotes farming based on circular resources provided by farmers themselves, including feed, soil, fertilizer and labour. The latter covers agriculture that depends heavily on inputs from elsewhere, such as concentrated feed, artificial fertilizers, machines and genetic material – making the agribusiness sector a major stakeholder. In his recent book *Gesloten vanwege stikstof* (*Closed due to Nitrogen*), he expands on the link between the almost unbridled faith in that kind of entrepreneurial agriculture and the Dutch nitrogen crisis, which he describes as ‘a problem that has been actively created over the past few decades’. According to him, it is not just agribusiness and the ministry of Agriculture that are to blame for the nitrogen problem. The Agricultural Sciences at Wageningen have played a key role in it too.

## In what sense has Wageningen played such a crucial role?

‘Over the past six or seven decades, agriculture has fast grown into a massive agro-industrial complex. WUR was a strong driving force in that process. It was made

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‘Wageningen doesn’t really have a good answer to the question of what should happen now’



Text Marieke Enter

clear to farmers that they had to say goodbye to their traditional practices and start thinking and working like entrepreneurs. The university totally identified itself with that process and went on to push it further, in close collaboration with the ministry of Agriculture and the agro-industry. There was too little attention to the downsides and the dangers of what was called “optimal agriculture”. And any interest in alternatives disappeared too, such as WUR’s confidence in the chosen path and in itself. And even today, WUR has a strange, ambivalent relationship with the process.’

## In what way ambivalent?

‘On the one hand, the university boasts that the Netherlands has an incredibly efficient agricultural sector thanks to WUR’s expertise. But as soon as problems arise, such as the nitrogen crisis, suddenly it’s nothing to do with Wageningen – it’s all down to other factors. In reality, these problems were always looming; it’s just that WUR failed to recognize them sufficiently. There was never any proper critical forecasting. You should always ask yourself: where are the catches, how could things go wrong under the influence of all sorts of factors? If a university neglects to do that, you quite quickly find yourselves at the agro-industry’s beck and

call. Not because you've been bribed or anything like that, but because you are operating within their frame of reference.'

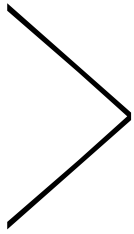
**Does the agro-industry's frame of reference explain why there's such a deadlock on the nitrogen issue?**

'Wageningen doesn't really have a good answer to the question of what should happen now. That is painfully clear from the recent report *WUR perspectives on*

*agriculture, food and nature* about dilemmas which rather makes my skin crawl: should we take animal welfare into consideration? Should the Netherlands feed the world? Those ceased to be dilemmas a long time ago: everyone knows which direction we should go in. Even worse to my mind is the fact that the report's conclusion



According to Jan Douwe van der Ploeg it is not just agribusiness and the ministry of Agriculture that are to blame for the nitrogen problem; the agricultural sciences at Wageningen have played a key role too ♦ Photo Duncan de Fey



boils down to a single proposal: 'we need a societal and a political debate.' That makes my blood boil. Is WUR really calling for a debate straight after the carefully conducted dialogue on the agricultural agreement was a total flop? I think it's a show of incompetence that WUR can't come up with anything better than that.'

**And yet that WUR report came in for criticism from a number of agribusiness organizations, which sent an open letter to WUR President Sjoukje Heimovaara saying that WUR should focus on doing research and not be 'for' or 'against' anything.**

'That underscores just how seriously entangled the

interests have become. As soon as the university even slightly questions the status quo, it's: Have you taken leave of your senses? Get back in line and get on with business as usual!'

**But Heimovaara didn't toe the line. Could that be a sign of a wind of change blowing through Wageningen?**

'Compared with Aalt Dijkhuizen's bulldog behaviour and Louise Fresco's stubbornness, you could call this a commendable step forward, yes. But the question is whether it's enough. Clinging to the theory of optimal agriculture, while it obviously flies in the face of reality, was a remarkable mistake that WUR made. And that calls for some serious soul-searching by the university: how could we have let ourselves get swept along by a theory when the empirical data has long been clear: hey, guys, that's not how it works, in reality it's much more complex.'

**Do you have an explanation for the dynamics of that?**

'In recent decades there have always been people, departments and networks that realized that at the very least, additional research was needed to avoid mishaps. Only there was proportionally little or no funding that

'Clinging to the theory of optimal agriculture was a remarkable mistake that WUR made'



Photo Duncan de Fey



‘It’s outrageous that co-financing from the business world is always required’

that. And that’s still the case, and it’s partly because of where the funding comes from. It’s outrageous that co-financing from the business world is always required. We are thereby letting the business world have a big say in where the “relevance horizon” lies, to use a term from knowledge theory. What lies outside that is dubbed irrelevant – so there is no funding for or interest in it. But the painful fact is that innovation often takes place precisely beyond that horizon, in the margins.’

### So students and staff who are concerned about the close ties between WUR and agribusiness have a point?

‘Of course! They’re absolutely right, in my view. You see, I’m part of the generation that joined forces in the *Boerengroep* (farmers’ group)\* Looking back on that now, supporters and critics will agree that it achieved a lot. Let’s hope that a new wave of that kind rolls through the university. The word sometimes gets a bit overused, but Wageningen needs a change of culture.’

### In what way?

‘There’s a contradiction inherent in the demand that WUR, as a merger of the former DLO agricultural research institutes and the former university departments, should present a united front to the rest of the world. Because in the market the DLO institutes operate in, knowledge is a commodity. Being right is crucial: why would anyone hire you if you admit that you are sometimes wrong? For them it is essential to say: we are right, we’ve always been right, and we guarantee that we’ll be right in future. Compare that with the university, where doubt is the basis of science – constantly asking and investigating: is that really right? It is extremely

important that we get a good internal debate going, and that we look for new theoretical perspectives.’

### Is that also why you applaud more competition for WUR?

‘WUR’s hegemony is in marked contrast to other European countries. They all have several agricultural universities and faculties – that is so even in a small country like Belgium. As a result, in debates you are sure to get a variety of starting points and critical views of one other. The Netherlands has just the one agricultural science institute, which carefully guards its monopoly: Wageningen. It’s true that Leiden, Amsterdam, Groningen and Nijmegen are now cautiously venturing into the agricultural domain. I think it would be a good development if it becomes more pluriform. Hopefully, that would stimulate the Wageningen supertanker to change course.’ ■

*\*The Boerengroep is a still existent Wageningen student organization known for its critical take on agriculture, which aims to bring agricultural theory and practice closer together, in collaboration with farmers.*

### Deconstructing agricultural dogmas



*Gesloten vanwege stikstof* describes how a socio-technical regime developed in the Netherlands – made up of interlocking and mutually reinforcing institutes, laws, technologies, assumptions, routines, interests and identities – which has resulted in the nitrogen problem and is now powerless and unwilling to solve the problem. That may sound like a shady conspiracy, but Van der Ploeg emphasizes in his introduction that there is much more

to it than naked self-interest and clandestine agreements. ‘It’s more a case of an (often unintentional) web of sub-processes and interests. This book is an attempt to map the source, the course, the bends and the power of that current.’

# TOWARDS BETTER DATA SHARING

If Wageningen's research data were stored using a common approach, the data would be found and used by other researchers much more often. In a new project, data scientists are looking for the optimal infrastructure for data sharing at WUR. 'We need input from all sides to find common ground.'

Text Ning Fan

**'R**esearch shows that scientists spend up to 40 per cent of their time on tasks such as finding the right data, checking its quality, moving it between systems and transforming it,' says Willem Jan Knibbe, the director of the Wageningen Data Competence Centre (WDCC). WDCC was set up to support developments in the field of big data and data science at WUR. 'Imagine how much time researchers could save if we had a common data sharing facility with guidelines for reproducibility, machine readability, data security and privacy policies.'

Currently, different WUR institutes and even different groups within the same institute use their own methods and tools for handling and storing research data. And new data programmes keep popping up. As a result, if data is collected by one group, others are not always aware of this data or easily able to find it.

The Wageningen Common Data Solutions (WCDS) programme aims to make research data easier to find and more accessible, interoperable and reusable. The programme started last September and is being funded by the Ministry of Agriculture for a period of two years. The programme explores the option of using generic open-source

tools (iRODS and YODA) to connect data from all nine WUR research institutes in a common research data management infrastructure.

## Common ground

'We need input from all sides to find common ground,' says Knibbe. 'As a starting point, we suggest using a combination of iRODS (advanced but complex) and YODA (basic but accessible) for fundamental data management tasks. By testing possible solutions across all nine institutes, we aim to find the right balance between central support and local expertise.'

In the ideal shared data solution Knibbe has in mind, users would not even realize they are using it. 'We should approach research data from various sources intuitively,' he

explains. 'Imagine a situation in which an environmental research group uses soil data for a study, then stores the data in a WUR data hub following pre-defined rules in their data management plan. Plant science researchers can then reuse the data to improve crop resilience, while animal scientists can use it for research into improving the quality of livestock feed. Not only can this save researchers a lot of time, but it can also open up more research opportunities. A single dataset has the potential to unlock limitless insights, and that is precisely what WUR needs. Of course, right now we still have a long way to go to make this happen.'

Ronald Petie of Wageningen Livestock Research is one of the data researchers involved in WDCC. 'I am pleased that WUR is taking data handling and data sharing seriously,' he says. Petie and his team are developing a data handling workflow for epidemiological research data on bird flu outbreaks as part of the WCDS programme. 'We are currently

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**'A SINGLE DATASET HAS THE POTENTIAL TO UNLOCK LIMITLESS INSIGHTS'**



'Imagine how much time researchers could save if we had a common data sharing facility.' ♦ Photo Shutterstock

using YODA to manage animal disease data. We will first see if this new system is suitable for managing bird flu data and explore its possibilities with other research groups. If it works, we could use the results to advise other scientists on the appropriate way to manage animal disease research data.'

### Cost reduction

In addition to making it easier to find and share data, the costs of data storage also need to be reduced, points out Tim van Daalen, a horticultural data scientist at Wageningen Plant Research. In the WCDS programme, he and his team are working on finding an affordable way to store greenhouse data. 'Everyone agrees research data is valuable, but the price we pay per terabyte per year has a big influence on how much can be stored. We worked out several examples showing that new solutions like a tape archive reduce the

yearly costs by more than 80 per cent. But can we data science researchers convince WUR to invest? I wonder what will happen when this project is finished. Data sharing infrastructure is the future; there is no plan B. But WUR is lagging behind in some aspects. The reality is that data storage is expensive and adding metadata is cumbersome. Saving everything would cost too much time and money, so we need specialist staff to determine which data to store and to store it in a way that lets it be reused. Most Dutch technical universities have appointed dedicated data stewards, someone who spends all their time dealing with data

collected by researchers. But at WUR, these tasks are partly carried out by the researchers.'

When asked if finding a common solution for all research groups at WUR is feasible, Knibbe is positive: 'Definitely! I do see a need to secure commitments from both researchers and support staff. We need to build on our current initiatives step by step, finding sustainable models for financial viability, developing expertise, and building technical infrastructure and partnerships. I hope we can make convincing progress in the two-year WCDS programme so we can continue our efforts.' ■

1 February is Common Data Day, with the presentation of the status and plans for the 15 use cases from the nine institutes. Researchers, data stewards and information management staff will get an opportunity to share their thoughts. For more information about the event, please contact [ning.fan@wur.nl](mailto:ning.fan@wur.nl).

# Dining with the Romans

Guido Sala, who teaches in the department of Physics and Physical Chemistry, has been working in his spare time over the past few years on his doctoral research on the gastronomic history of Rome. 'Food can be a starting point for reconstructing parts of history.'

I am amazed that a city of one million inhabitants, 2000 years ago, could be kept supplied without all the cooling and transport techniques we have nowadays,' says Guido Sala. His fascination with history – particularly ancient history – is so strong that about 18 years ago, he decided to do a Bachelor's degree in history at Utrecht, while teaching at WUR. He graduated with a thesis on Christian symbolism during the rule of Emperor Constantine the Great. 'When I finished, I thought, okay, what next?' So he consulted a professor at the University of Leiden whose chair group focussed on cultural integration in the Mediterranean in the ancient world, to ask whether he could do a PhD on gastronomic history in his spare time.

'The professor was doubtful at first, but eventually came to see it as a nice project.' Sala graduated last November with the second PhD of his career, and with ex-WUR president Louise Fresco as one of his 'opponents'. 'Her presence literally brought my Wageningen and Leiden worlds together,' says Sala.

## Taxes

In his thesis, he reconstructed aspects of the Roman economy and society in the period between the second century BCE and the fourth century CE, based on what the Romans ate. 'I studied Rome in terms of the Romans' eating habits, culinary culture and supply chains.' 'The biggest market complex in the city was much bigger than, say an Albert



Text Dominique Vrouwenvelder

Heijn XL supermarket, including the warehouse. Trade structures such as market complexes were designed for large numbers of people,' explains Sala. 'How many? A city can have as many residents as can be fed. Using data from the food supply system, we can estimate that.' In that period, Rome was not entirely self-sufficient. 'Just as we import some of our food nowadays, Rome imported some products from faraway too. Grain, for example, was shipped from North Africa, Sicily and Sardinia,' says Sala. These regions were part of the Roman Empire and paid taxes to Rome in kind. 'Olive oil also came from North Africa or Spain. But fresh produce came from nearby. The hills around Rome served as a kind of vegetable garden for the city. It was usual for Romans to forage for food in the woods and fields. Nuts or chestnuts, and wild plants that were used as a kind of spinach or in salads.' For his research, Sala used data from organizations such as the UN food and agricultural organization FAO on the



Carbonized bread. Herculaneum, 79 CE • Photo National Archaeological Museum, Naples



relationship between income and the consumption of proteins, carbohydrate, fats, vegetables and fruit in different periods of history and in different parts of the world. He used this data to reconstruct 'shopping lists' for four different social classes in Ancient Rome. 'Actually, we have always divided Roman civilization into two groups: the rich and the poor. We knew what the rich ate because their banquets were frequently described in literature. The poor had porridge, bread, a little wine and occasionally some olives, we thought. My research shows that they had a far more varied diet than that. They also ate meat, cheese or other dairy products, and fresh fruit

and vegetables. We see that from archaeological digs. But they ate them in smaller quantities than the rich.'

### Gastronomic history

'Gastronomic history is sometimes seen as kind of second-rate history, just a collection of fun facts and anecdotes. But my research shows that it can also

'The poor had a more varied diet than we thought. They also ate meat, cheese and dairy products'

be the starting point for discovering information about the structure and size of the Roman economy. Food is a major economic component, and is therefore part of history,' claims Sala. And there is interest in the subject on the Wageningen campus. 'As well as the regular courses taught by our group, I teach a course on the History of Food Production with colleagues from the Rural History chair group. That course grew out of my hobby.'

Asked whether and how his thesis has contributed to his work at WUR, Sala has to think for a moment. 'This experience made me realize that I was getting a bit stuck in my academic ideas and perspectives. The more experienced I became in studying themes within my subject area of Food Technology, the less often I questioned myself as a scientist. That made my world smaller, I realized when I was doing this PhD. And my thesis is interdisciplinary: to answer my research questions, I drew on findings from the agricultural sciences, food sciences, demographics, economics and archaeology. When you have to prove yourself in a new academic field, you understand that you can't explain the world and life on the basis of a single discipline.' ■



A bakery. Fresco from Pompeii, 79 CE • Photo National Archaeological Museum, Naples

# OUT AND ABOUT FOR CROPMIX

Research assistants Bart Burger and Anna de Rooij hadn't walked more than 20 metres into the field before they heard the distinctive wingbeat of a flock of partridges fluttering up from the vegetation near the strips of stubble. At least 10 of them, a good start to a day of counting field birds. Text and photos Marieke Enter

**B**urger and De Rooij are on the road as field assistants for CropMix, the research programme on the question of how crop diversity (or more precisely, strip cultivation) can speed up the transition to a more sustainable farming system. The programme studies both the socio-economic aspects and the agro-ecological aspects of the question. Field bird counts



on the 25 arable farms participating in CropMix play a key role in the latter. For Burger and De Rooij, today's task is a field bird count on the CropMix farms in the districts of Twente and the Achterhoek, starting at the Deldener Es, a spot that perfectly illustrates the Twente concept of 'oale grond' (literally: old land). A rolling landscape formed during the second-to-last ice age, full of fields surrounded by hawthorn hedges and dotted with old oak copses. This countryside is part of the nearly 700-year-old Twickel estate, which has been farmed for generations. For a few years now, some of the land has been leased to Arjen and Winny van Buuren, who run a mixed farm (two in fact: De Zenderense Es and De Veldhorst), where they participate in CropMix.

## Weeds or wildflowers

The impressively large spear thistle rosettes in this strip-cropping field are evidence of the Van Buurens'



nature-inclusive approach – you won't find many thistles of that size on the CropMix farms using more intensive farming methods. 'Arjen and Winny don't talk about weeds, but about wildflowers,' confirms Burger. Birds and small wild animals flourish under this kind of farm management, judging by the outsized hare zigzagging across

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**'We hope to find out how attractive strip cultivation is for field birds'**

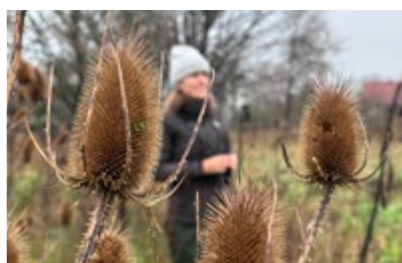




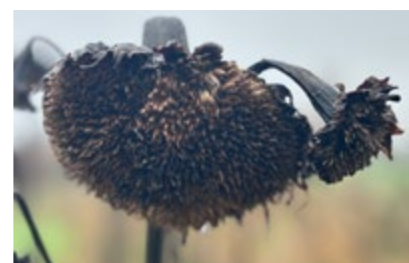


Field assistants Bart Burger and Anna de Rooij walk across the fields, carefully noting which birds 'interact' with a specific plot. They are doing this all over the Netherlands, at all the 25 arable farms taking part in CropMix. The photo is of farm Deldener Es in Twente.

the field and the flock of goldfinches colouring the leaden winter sky. The abundant life on and around the strip cultivation is in sharp contrast to the next field the field assistants monitor for 'interaction', to use its official name, between field birds and the plot. In other words: birds that rest or nest, forage or scratch around there. Just flying over doesn't count, but flying up from the ground does. The main difference between the strip-farmed field and this reference field is that here a single crop was grown last season – in



this case, barley. During the 10 minutes per field allocated to the inventory, Burger and De Rooi register only a hare here – there is not a bird to be seen. In order to gather even more data for comparison, they also conduct an inventory on a third type of plot: a 'bird field' sown with a mix specifically designed for birds. This field is chock-a-block with withered sunflowers and teasels, whose seeds are favoured by the likes of goldfinches and bramblings. On



closer inspection, it even turns out to harbour some late flowering of species known to attract insects, such as yarrow and oilseed rape. These are valuable foraging locations for birds, especially in midwinter.







‘By carrying out counts for a variety of types of fields, we hope to find out more about exactly how attractive strip cultivation is for field birds,’ explains Burger. Because a lot of questions remain unanswered. Do more field birds brood on land with strip cultivation than on conventional fields? Does strip cultivation increase insect numbers in the crops – and thereby the food supply for field birds? And does it matter how wide or narrow the strips are, which crops are combined on them, and whether they are annual or perennial crops? In search of answers to these and other agro-ecological questions, the field assistants are criss-crossing the Netherlands to collect data from participating farms. They do this in all seasons. ‘We are now visiting this farm

for the eighth time this year,’ says Burger. ‘We have already done inventories of earthworms, ground beetles and flying insects, for instance.’ That is interesting too, but not as nice as the field bird inventory, to De Rooij’s mind. ‘With the small animals such as beetles and insects, the determination is done in the lab and what we do in the field is mainly setting and emptying traps. With the field birds, it’s all about observing and determining on the spot,’ she explains as she raises a finger to alert us to the call of a snipe. What was her most exciting observation? ‘A short-eared owl, on a conventional farm in Didam, the Hoalderkamp – precisely on a day when Bart didn’t come along, whereas he’s the more fanatical birdwatcher of the two of us.’ ■

### TOP 3 proper field birds with most counts:

- 1 Blue-headed wagtail 
- 2 Skylark 
- 3 Meadow pipit 

### TOP 3 rarest birds in the counts:

- 1 Short-eared owl 
- 2 Whinchat 
- 3 Quail 

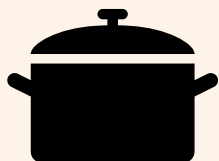
### Research context

Besides the research on the field birds (with Rink Waenink as PhD researcher), CropMix includes another 20 research projects, with about the same number of PhD researchers and two postdocs. Most of these projects address specific questions posed by crop farmers and others involved in the transition to ecological farming methods. The projects have been clustered in three work packages: agro-ecology, institutional change and socio-economics, and technology and logistics. These are explained in more detail on [www.cropmix.nl](http://www.cropmix.nl)



## Flavours of WUR

You encounter all the flavours of the world in our WUR community. Ananya Doraswamy (Master's student of Communication, Health and Life Sciences) shares a recipe from India for a moment of joy and companionship.



# Cardamom Chai and Onion Pakodas

'Back home in India, my family came together every evening over chai — a cup of tea. We relaxed our busy minds and fed our souls with laughter and the stories of the day. I still make chai here at home in Wageningen: a cup for myself and one for whoever else wants it. It breaks the stream of busy activity, inviting a moment of quiet joy and companionship. The tea is extra delicious with this savoury snack.'

### Cardamom chai

- 1 Pour water and milk into a small pot.
- 2 Split open cardamom pods and add them.
- 3 Allow mixture to simmer on a low flame for a few minutes.
- 4 When it's foaming slightly around

the sides, add the tea powder and take off the heat.

- 5 Stir once and let the tea steep until the mixture turns brown. The longer you leave it, the darker it gets and the stronger it tastes.
- 6 Strain the tea into mugs.

### Onion pakodas

- 1 Put the onions and salt in a large bowl.
- 2 Mix well by hand to separate the onion layers.
- 3 Add the ginger, coriander and chillies.
- 4 Let the mixture rest for 5-10 minutes.
- 5 Add the chickpea and rice flour gradually while mixing the contents of the bowl.

### Ingredients (2 persons):

#### Cardamom chai

- 1 cup of water per person
- 1/5 cup of regular or oat milk per person
- 2-3 cardamom pods
- 1 level tsp black tea powder per person
- Sugar (optional)

#### Onion pakodas

- 2-3 onions cut in half, then sliced
- 2cm cube of ginger, finely diced
- Sprigs of coriander, finely chopped
- Salt to taste
- Paprika or chilli powder to taste
- 100g rice flour
- 70g chickpea flour
- 1/2 lemon
- Green chillies (optional)
- Oil for frying



Ananya Doraswamy, Master's student of Communication, Health and Life Sciences

- 6 Sprinkle water if required.
- 7 Make little clumps of this mixture, put them in a pan with hot oil and fry until brown and crispy.
- 8 Drizzle lemon juice on top before serving.

## IN MEMORIAM

### PETER BEYENBURG-WEIDENFELD

It is with great sadness and disbelief that we have to inform you that one of our students, Peter Beyenburg-Weidenfeld, passed away on 21 December 2023.

Peter started his Bachelor's in Food Technology in 2020. Besides activities related to his own programme, Peter also cared about education at WUR as a whole and he joined the Student Council. A good environment for students was important to him. He recently joined a protest against high food prices in WUR canteens.

Peter built close friendships, both within and outside his study programme. He was described as a very kind and pleasant person, who was an incredible story-teller. His friends shared some cherished memories of Peter:

'Peter was a beloved friend and housemate. His loss will leave a huge void. His smile was always sincere and made you feel welcome. Also, he was always in for a chat if you needed him. And he was generous: he always wanted to share drinks and food if he thought you needed it.'

'Peter was a friend who was always there to take coffee breaks and talk about random life stuff. You will be missed so much.'

Our hearts are with Peter's family and friends in Mechernich, Germany and in other places all around the world, for whom this is an incredible loss.

*On behalf of the Food Programme team and Peter's friends*

[NEW]

# Limelight



Not much culture in Wageningen? Not true! If you keep an eye out, you will notice people all around you are making music, giving poetry readings, taking photographs or designing clothes. In this feature *Resource* puts WUR's creatives in the limelight. This time: Myrthe van Dok (artistic name: Mips), who is performing at the Singer-songwriter festival in Cultura in Ede on 27 January.

Text Ilja Bouwknegt

**SAT**  
**27-01-2024**

Cultura Ede (Molenstraat 45)

**19:00 to 23:00**

## Mips will be performing in the Singer-songwriter Festival in Cultura

Myrthe van Dok (22) is busy: she's in the second year of her Master's in Biology, she's writing her thesis, working as a student assistant, chairing Popculture Wageningen and writing songs. Tonight, *Resource* can have a word with her just before an open mike night in the Bblthk, where she's singing one of her songs. 'It's called *Coastline*,' she says. Like a true Wageninger, Myrthe gets most of her

inspiration from nature. 'I'm working now on an album about water. *Coastline* is about the waves. They come and go, bringing shells to the beach or pulling them off it again. The idea is that everything is transitory, both good things and bad things.'

This open mike night in the library is informal and anyone can present something. Myrthe is performing as Mips, with songs she wrote herself. Later this month she can be seen and heard at the Singer-songwriter Festival in Cultura. She sees that as a great honour. 'I got a place at this festival thanks to a performance last year. Singer-songwriters from all around the country come to Cultura, and there

is even one from the UK. Some are famous or really up-and-coming.'

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### 'Being an amateur among the pros feels big'

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The line-up includes Jana Mila, Marise and Benedict Cork. So: Saturday 27 January in Cultura. Tickets for the festival (10 euros) can be bought online on Cultura's website. Mips will be the first act, and she's looking forward to it. 'I've performed quite a lot, but being an amateur among the pros is more nerve-racking. It feels big.'



Student Myrthe van Dok will be performing alongside the professionals ♦ Photo Sjoert Bakker

# WEEKLY UPDATES ON STUDENT LIFE AND WORKING AT WUR?

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## Resource

WUR from within: straight, sharp, transparent



## Colophon

*Resource* is the independent medium for students and staff at Wageningen University & Research. *Resource* reports and interprets the news and gives the context. New articles are posted daily on [resource-online.nl](https://resource-online.nl). The magazine is published every fortnight on Thursday.

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### Healthy ageing



Wednesday,  
24 January  
Café Loburg  
19h45 Music: The Mannetjes  
20h15 Science

**Speakers**  
Dr. Sanne Gijzel (GERION)  
Dr. Pol Grootswagers (WUR)











Previous generations of students didn't care how cold it was. The photo shows the 2018 New Year Dip in the Rhine at De Wolfswaard in Wageningen • Photo Guy Ackermans



# NEW YEAR SWIM POSTPONED UNTIL JULY

Because of the extremely cold weather in the past week, several Wageningen New Year dips planned for the second week of January have been put on ice. The organizers are now planning a big joint New Year Dip on 5 July.

**I**t's been crazily cold this week and it would be irresponsible to expose our members to such bizarre temperatures,' says Yara van der Sloot, chair of Aquarius, one of the clubs involved. 'I'm really disappointed that this event is a washout but it just wouldn't be cool if everyone got hypothermia.' The other clubs

that were organizing a New Year Dip got cold feet too. So the dip is postponed until July.

## Collective dip

The various clubs have decided to join forces and make it a joint event. Van der Sloot: 'Having all those different dips was muddying the waters a bit anyway. In consultation, we all agreed on 5 July as the date for a collective New Year Dip. The risk of hypothermia is considerably smaller then. And the exams will be over, so it's always a good time to go down to the Rhine.'

But isn't cold weather an essential part of a New Year Dip? 'Some older students were indeed critical of the plan,' confirms Van der Sloot. 'They think the whole idea is that it's tough and called the plan "typical of the snowflake generation." That feels below the belt to me. Life is hard enough. We didn't take the plunge on this without giving it some thought and we stand by our decision.'

**'It would be  
irresponsible to expose  
our members to such  
bizarre temperatures'**