Resource

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The journalism platform for all at Wageningen University & Research

Aula organ off to Italy

22 million to study plants' sense of touch

Plus Ultra III is coming

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No massages if in doubt



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FOREWORD

Unsolicited advice

The interview with Arthur Mol could have been more probing. Especially about the other universities incorporating WUR topics in their curricula - after all, the former dean was meeting regularly with the other university deans. And perhaps Resource pays rather too much attention to activism, for example with its article giving students tips on how to be an activist. Would a roundtable discussion not be a better solution? What an impressive article about student Bas Hovius, in which he talks candidly about his struggles with life. And the regular 'Live & Learn' column, in which scientists talk openly about how research doesn't always go smoothly, is a real gem. These are some of the hits and misses from our meetings, three times a year, with our editorial advisory board, in which they take a critical look at our magazine and news stories. The advisory board also gives advice, solicited and unsolicited, throughout the year.

The tips and advice don't just come from the advisory board though. We can easily be contacted via resource-online.nl and our social media channels if you want to give feedback or have tips for news items. Have you spotted something *Resource* should be looking into? If so, tell us and we'll investigate (independently of course, see p. 5).

Willem Andrée Editor-in-chief





Photo stills from the video portraits

Over 22 million euros to study plants' sense of touch

Wageningen biochemists Joris Sprakel and Dolf Weijers have been awarded a Gravitation Programme grant of 22.8 million euros. They head a consortium of seven universities that will spend the next ten years studying plants' sense of touch.

Biologists have known for about a century that plants 'feel' something when touched. Take carnivorous plants where the leaves snap shut as soon as they sense prey. But it is still not clear how this functions at the cellular level, without the aid of brains or nerves. Now researchers from Wageningen, Utrecht, Nijmegen, Eindhoven, Groningen, Amsterdam (VU) and Leiden will be working together on this in the new 'Green Tissue Engineering' project.



The project requires an interdisciplinary approach. 'When cells talk to one another, they do so using the language of cells, which is biochemistry,' says Weijers. But contact, wind or a fungus that penetrates the plant are all mechanical stimuli. 'The plant has to translate the mechanical signals into the language of cells.' The researchers want to use this fundamental knowledge, for example to make plants more resistant to disease. 'To infect a plant, pathogens have to get through the plant's tough outer layer,' explains Sprakel. That means there is mechanical contact between the two. 'If we know how



'Touch is a mechanical signal that the plant has to translate into the language of cells' the plant activates its defence systems, perhaps we can make it particularly sensitive to such signals,' says Weijers.
Within the project, 57 young scientists will be able to work on subprojects. 'The training for PhD candidates often involves a strong

focus on a single discipline,' says Sprakel. But this project gives us the opportunity to train people in biology, physics and chemistry.' <code>NVTWH</code>

Plus Ultra III is coming

Construction will start this week on the third multi-occupant hub in property developer Kadans's Plus Ultra series. The hub will be built in the vacant plot between Plus Ultra I and Campus Plaza. It will have five floors and should be finished within a year. Like Plus Ultra I, Plus Ultra III will have both offices and laboratories (Plus Ultra II only has offices). Tenants have already been found for the first two floors. Some of the organizations currently leasing space in Plus Ultra I will move to the new building. RK



Artist's impression of the new building



That is the number of kilometres the books and journals in the Forum library would cover if you put them in one long line (according to the annual report). It might be a little longer or shorter as the library staff used an average for their calculations: they assumed a metre of shelving can take 34 books or journal volumes. The library will be storing fewer and fewer 'real' books over the next few years as more and more are digitized. α

CSC won't increase grants

The Chinese Scholarship Council CSC is refusing to increase its scholarships for PhD candidates up to the norm set by the Dutch immigration service IND. As of this year WUR is applying that norm, which is currently 1564 euros a month. CSC gives its PhD candidates 1350 euros a month. That doesn't mean no more Chinese PhD candidates in Wageningen. WUR is collaborating with the Chinese Agricultural University and Chinese Academy of Agricultural Sciences to increase the grant to the appropriate level. WUR has joint research programmes with these two organizations. What this all means for PhD candidates not covered by these programmes is still unclear. It is too soon to see the effect of the new requirement. RK

'Protect independence of university media'

Academic and applied universities should do more to protect the independent position of their journalistic publications, say the Dutch Union of Journalists (NVJ) and the Association of Science Journalists (VWN) in a statement published Tuesday last week.

The NVJ and VWN see a 'worrying trend towards censorship' of university media publications. They therefore call on universities to do more to ensure the independence of their media publications, for example with a watertight charter and an independent journalistic advisory board. University media publications are largely financed by the universities themselves, which are therefore funding their own watchdog. That financial dependence can open the door to censorship if there are not enough safeguards for journalistic independence.

'For many university media publications, the room for manoeuvre depends too much on the goodwill of the execu-

'For many university publications, the room for manoeuvre depends too much on the goodwill of the board'

tive board. We have to end that,' says *Resource* editor-in-chief Willem Andrée, speaking in his capacity as chair of the Editors-in-Chief Group, a collaborative venture between all the university journalistic publications. Andrée was one of the panel members in a public debate organized by the NVJ and NVW.

Incidents

The statement and debate were prompted by a series of incidents. Last autumn,

for example, the editors of *Cursor*, the 'Resource' of Eindhoven University, blacked out their website in protest at the dismissal of their editor-in-chief and restrictions on their editorial freedom. Even more recently, the Rotterdam University of Applied Sciences journalistic magazine *Profielen* was moved to the Marketing and Communications department.

Good examples of university publications'

Good examples of university publications role as a watchdog are the revelations in *Delta* about how Delft University of Technology inadvertently helped the Chinese army, and in *Mare* showing how Leiden's board failed to take action on scientific malpractices. Closer to home, the article 'How "reliable" disappeared from a nitrogen report' is a fine example of an investigative report by *Resource*, on political intervention in science. ME



Subletting platform for exchange students

In recent years, exchange students coming to Wageningen have had trouble finding accommodation. Now WUR'S Exchange Team wants to help them in their quest. A subletting platform is being set up through which WUR students going abroad can offer their room to exchange students coming to Wageningen.

Exchange Team coordinator Eric de Munck says, 'Last January, we held a survey among the 300 WUR students going on an exchange in the first semester. Five of the six WUR students going on an exchange had sublet their room, but only one in six had done so to an incoming exchange student.' That meant only 50 rooms were available as sublets for the 180 incoming exchange students, explains De Munck. This is why urgent measures were required last summer, such as sharing a room.

The new platform is being developed in partnership with the international student society ESN. De Munck expects the platform to go live within two months. LZ



Aula organ off to Italy

The Aula organ has found a new home. After accompanying thousands of PhD ceremonies and inaugurations, the organ fell silent two years ago when WUR sold the Aula to the Heerenstraat Theater. There was no room for this large instrument in Omnia, the Aula's replacement on campus.

Heerenstraat Theater project manager Laura Kaper had a lot of trouble finding a new home for the organ. 'Keeping it in the Aula was not an option. Where the organ is now is where the projector and top row of seats will be in the film theatre.' So she had to find a new owner.

That process started with an investigation into the organ's historical and cultural value. Which was negligible. The organ dates from 1852 but it was extended in 1977. 'The pipes are a real mix.' The organ was then put on the market, but no one showed any interest for more than a year. Churches in and around Wageningen were either

not interested or found the costs of moving the organ (80,000 euros) too high.

Good result

Until Kaper found a place in Italy through her network. Kaper: 'That place is the San Pietro Apostolo church in Fiano, a small town near Pisa.' It certainly won't be a demotion for the organ in terms of its surroundings. It means the organ, which was originally built in Schleswig-Holstein in Germany, will be moving to Italy. A good result, says Kaper. 'It might not be the most attractive organ, but it would be a shame if it was no longer played.' RK

Student Staff Council agrees to Data Science BSc

The new 'Data Science for Agri-Food, Health and Environment' Bachelor's programme is one step closer now that the Student Staff Council (SSC) has given its approval.

The SSC did not consent to the new degree programme straight away, says Evan Ackermans, a student representative on the Council. 'The aim is to combine data science with the life sciences. We thought the plans made that aim clear, but they didn't show clearly how the substance of the life sciences would be incorporated in the courses.'

After the Executive Board sent the SSC extra information,

such as learning outcomes per course and examples of life sciences course content, SSC decided to approve the new degree after all. With this step complete, WUR has now applied for a 'macro efficacy assessment', in which the Ministry of Education investigates whether there is sufficient demand for this qualification in the labour market. If the Dutch government gives the go-ahead, the Accreditation Organization of the Netherlands and Flanders will evaluate the plans for the new degree. If all goes well, the new BSc will start in the 2025/2026 academic year. LZ

SPUD GROWING CAN IMPROVE

The Netherlands is a potato country: half of all arable farmers grow spuds and potato cultivation accounts for 30 per cent of arable farmland. The average field yields 52 tons of potatoes per hectare, but research by agronomist Paul Ravensbergen shows big differences between plots. And something can be done about this. Photo Shutterstock

Ravensbergen recently obtained his PhD for a detailed study of the variation in potato harvests in the Netherlands. Why can one farmer get yields of 80 tons per hectare and another only half as much? To investigate those differences, Ravensbergen spent two growing seasons crisscrossing the country to monitor potato cultivation. 'I tracked the growth of potatoes from April to September in 96 fields in regions including Drenthe, Hoeksche Waard and north Limburg. I visited each field 10 to 13 times and ended up driving a total of 80,000 kilometres in my little Ford Ka.'

Sand and clay

He used the 'yield gap' to compare the yields from different plots. That is the difference between a plot's theoretical maximum yield and its actual yield. And that difference is substantial: on average, farmers are missing out on about a quarter of the potential harvest. The main culprit in sandy soil is drought, while the main factor in clay soil is waterlogging that prevents the plants from breathing.

Water – whether too much or too little – plays a key role. To obtain maximum yields, you need good irrigation and drainage. In a trial plot with sandy soil, a lack of irrigation reduced yields by 17 tons per hectare. In clay soil, excessively

'You can reduce inputs and still get similar yields'

wet conditions led to 12 tons fewer potatoes per hectare. Other factors in addition to water that play a role in determining yields are disease

(in sandy soil), soil structure (compacting in clay soil) and when the potatoes are planted.

An interesting finding is the excessive use of nitrogen. In clay soil, farmers use 265 kilos more nitrogen on average than the plants need. The figure for sandy soil is 139 kilos. All that excess nitrogen ends up in the soil, with the inevitable consequences. Ravensbergen: 'Some excess is unavoidable, as the plant can never absorb all the available nitrogen. An efficiency rate of 70 to 80 per cent is good going.'

According to Ravensbergen, these figures show farmers use much more nitrogen than they need for the yields they get.

'But farmers don't just look at the nitrogen. Especially in the case of clay soil, the organic matter in the soil is important. When farmers apply animal manure, that automatically means more nitrogen. Farmers are continually considering the state of the soil. That means looking at the whole rotation of crops and green manure plants.'

Even so, Ravensbergen's study shows farmers could improve their use of inputs. The best performing farmers have both higher yields and less excess nitrogen. 'It is good news that you can reduce inputs and still get similar yields. That offers prospects for a more efficient and environmentally friendly form of potato cultivation in the Netherlands in the future.' RK



[Live&Learn]

A failed experiment, a rejected article: in academia such things tend to be labelled failures. As for talking about it? Not done! But that is just what WUR co-workers do in this feature. Because failure has its uses. This time we hear from Dawn Cheong, a PhD student of Rural Sociology.

Text Nicole van 't Wout Hofland • Illustration Stijn Schreven

'Six years ago, I started my PhD research and made a choice that caused me quite a few problems. I study the gendered impact of agricultural innovation in lower income countries. I decided to focus on Myanmar, a country that by 2018 had only been accessible to the rest of the world for 10 years. I had just started my research in Myanmar when

'Just when I thought the worst was behind us, the military in Myanmar staged a coup'

COVID broke out and I had to rush back to Wageningen. A year passed as I helplessly – and somewhat in panic – watched my PhD trajectory get delayed further. Just when I thought the worst was behind us and travel restrictions were slowly easing, the military in Myanmar staged a coup. With my research area situated right in the middle of a conflict zone, returning to Myanmar became impossible.

Meanwhile, my research had already accumulated a two-year delay. Ultimately, relocating my study to another country (Nepal) became the only option. Now, six years after initiating my doctoral research, I am finally about to complete my study. It was a stressful period with a lot of uncertainty, but the situation did put everything into perspective for me. While of course I was concerned about my dissertation, my foremost worries revolved around my friends and colleagues in Myanmar. Some people would label my delay as failure, others as bad luck. For me, these unforeseen twists show how society seeps into science. We may be confined to our research bubble, but political and institutional failures on the other side of the world can impact us. Together, we need to build the resilience to cope with such issues.'





Tipping point for human mind too

The mathematical theory that helped find tipping points and early warning signs for the loss of resilience in lakes and forests can also be applied to the human mind, according to new research headed by 'tipping-point professor' Marten Scheffer.

About 15 years ago, aquatic ecologist Scheffer became the first to successfully apply mathematical theories about critical turning points in complex systems to empirical situations, namely freshwater lakes that turn murky. The finding that these fundamental principles can also be applied to the human mind offers new possibilities for the prevention and treatment of psychiatric disorders.

The essence of Scheffer's 'tipping-point research' is the insight that complex systems can be in various states of equilibrium and systems don't move smoothly from one state to another but rather in abrupt shifts — via tipping points. The tipping points are preceded by early warning signs. The new research shows this mechanism also applies to psychiatric disorders. Psychiatric conditions are fundamentally different to other diseases as they can recur time and again, with the symptoms changing in the course of the person's life. This research offers new possibilities for the early recognition and treatment of disorders. 'Our findings imply the existence of early warning signs,' explains Scheffer. 'They could be picked up by smartwatches or smartphones, leading to timely interventions to strengthen someone's mental resilience.' Another important observation is that brief interventions can sometimes be enough to prevent the disease from recurring in a person for good.

Scheffer: 'That is now accepted, hard science for ecosystems and the climate, but it's new in psychiatry.' The journal *JAMA Psychiatry* will publish two articles on the topic next week. ME

Mobile clinics in rural Africa:

Seven times more jabs

The use of mobile clinics is an effective and efficient way of boosting the vaccination rate in rural African communities. This finding is particularly relevant given the major vaccination campaigns planned for malaria.

Maarten Voors (Development Economics chair group) carried out research in Sierra Leone on this topic in early 2022, a year after COVID-19 vaccines had become available. An article recently appeared in Nature. Vaccination campaigns traditionally focus on boosting demand. 'People are encouraged to come and get a jab in all kinds of ways – from text messages and Facebook posts to flyers,' says Voors.

'A high vaccination rate is important because of the huge social and economic impact of diseases'

Although it is now known this approach does not have much effect - it makes a difference of 1 to 2 per cent at most - it was still the approach taken by most governments, including in Africa, when the COVID vaccines became available. Development economist Voors was dismayed. 'I think people failed to realize what such calls mean in practice for communities living in remote rural areas,' he explains. 'In Sierra Leone, it can take someone several hours and a week's wages in costs to get to where the vaccines are being administered. That is like asking us to pop over to Paris for a jab that mainly protects your parents' generation.' Unsurprisingly, the vaccination rate was very low in Sierra Leone, at less than 10 per cent. The Ministry of Health recognized the problem and expressed an interest in mobile clinics that could bring the



In Sierra Leone, it can take someone several hours and a week's wages in costs to get to where the vaccines are being administered • Photo Shutterstock

vaccines to remote areas and set up temporary vaccination centres. Together with his team - and with support from the ministry, the international NGO Concern Worldwide and donors such as the Dutch Research Council and WAM - Voors studied what impact the clinics had on the vaccination rate. In the 100 villages in the intervention group, the vaccination rate increased by 26 percentage points in just 48 to 72 hours. And because people from neighbouring villages also came to the mobile vaccination centres, the total number of vaccinated people increased by a factor of seven. Voors: 'This is what distribution really involves, rather than the interpretation in the past of the pharmaceutical industry: sending the vaccines to the airports and leaving them there to gather dust.'

The mobile clinics are not only effective but also affordable, emphasizes Voors. 'The distribution of vaccines via mobile clinics costs 33 dollars per person, compared with 80 dollars for the regular vaccination campaigns. This approach can become even more efficient if you combine the delivery of vaccinations with other forms of healthcare. Scaling up offers a lot of potential for yet more health benefits, he argues.

The research is particularly timely as a major campaign to vaccinate people against malaria is about to start. What is more, Africa too is suffering a loss of confidence in vaccinations. 'There is a lot of misinformation. There are fears that the scepticism about the COVID vaccines will also start to affect polio and HPV jabs, and malaria vaccinations in the future. It is important to have a high vaccination rate because of the potentially big social and economic impact: if far fewer people become sick or die from the disease, that has a huge effect on the economy and society in the long term.' мЕ

PhD theses in a nutshell

Emaciation

Cachexia is the extreme emaciation that accompanies serious illnesses such as cancer. The hypothalamus plays a central role in that emaciation and muscle atrophy. Xiaolin Li studied the interplay between the tumour, the hypothalamus and the intestines in cachexia caused by bowel cancer. In patients with cachexia, the mitochondria (the little energy factories) in the muscles don't work properly. That reduced functioning is visible before the disease reveals itself and is accompanied by changes in blood values. So Li may be on the trail of an indicator for cachexia. RK

Cancer Cachexia as Multi-organ Syndrome. Xiaolin Li

Supervisor Renger Witkamp

Artificial life

Can you create a living cell? And what is life, actually? According to Lorenzo Olivi, one of the requisites is definitely replication. So he investigated how the DnaA protein, which sets the replication of DNA (reproduction) in motion, can be guided in a controlled fashion in E-coli. In order to reveal the process, he made use of sptPALM, a microscopic technique for tracking a single DnaA molecule in the cell. A synthetic cell is by no means in sight yet. But this is an interesting thesis which paves the way for the controlled synthesis of life. RK

To Rebehold the Cell. Lorenzo Olivi ◀ Supervisor John van der Oost

Disturbed forest

Disturbances to tropical forest can be charted using satellites. The availability of more and more detailed images is facilitating this inspection tremendously. Johannes Balling linked the data from those images to data on rainfall and fires in Africa. With predictable conclusions: the less the rainfall, the more disturbance is caused by forest fires. And the more accessible the forest, the more disturbance there is too. RK Temporally-dense multi-source satellite remote sensing for advancing the monitoring and characterization of tropical forest disturbances.

Johannes Balling **◀** Supervisor **Martin Herold**

THE **PROPOSITION**

PhD candidates explain the most thought-provoking proposition in their thesis. This time it's Jozsef Takacs, who received his PhD on 28 February. His thesis was about viral and fungal pathogens in house cricket rearing.



'Change in attitude regarding the environment starts with the education of the youngest generations."

'The prevailing attitude of modern society is that "the more or the faster, the better". Through education, we can change this mindset. Sustainability is seen as important for businesses, but often only if it doesn't hinder their economic growth. We need to teach children from an early age that everything we do has an environmental cost. With education, we can help children to understand the consequences of increased production and that sometimes it's worth sacrificing comfort for the greater good.

To take an example from my field of study, entomology: it is important for students to understand basic biology, such as the body parts of insects. But it's also important to step back and look at insects in a wider context, to understand their role in ecosystems and the interactions

between different players. We often tell students that pests are harmful because they can damage the crops we grow. But in nature, these so-called pests are just insects playing their part in the ecosystem. The artificial environment we created for our purposes gives them a negative role to play - perceived strictly from an economic point of view. Without insects, no ecosystem could be complete. I advocate starting early in teaching students that every component of a system has a role to play. They need to understand that any changes we make will have an impact on the whole system, whether significant or minor.' NF

Logging in

Benjamin Franklin, one of the Founding Fathers of the United States, once said: 'Those who would give up essential Liberty, to purchase a little temporary Safety, deserve neither Liberty nor Safety.' You realize, of course, that I'm talking about vital and fundamental issues today. Do I mean a researcher's freedom or the environmental impact of campus development? No, it's even more important than that, namely the password requirements that IT imposes on your WUR account.

Every three months you get a warning from WUR IT: 'This is to remind you that your WUR password expires in five days.' Like everyone

'If you're anything like me, you take a favourite character from a book and you get AnaSteele1!' else at WUR, I then try to come up with a new password within the painfully narrow limits (no previous password, no combination of two letters that are also in your account name, must include upper case and lower case letters,

numbers and symbols, more than seven characters and no spaces). If you're anything like me, you take a favourite character from a book and get 'AnaSteele1!'. But by the time you've worked or studied at WUR for eight years, you've been through 24 passwords. Someone who's been at WUR for 30 years now needs 'Katniss12345!!!!!' to get into their mailbox.

Big deal, do you say? Stop whingeing, Campsie, just get yourself a password manager. But a password manager makes a mockery of the change of password, because all a cybercriminal has to find is the password to your password manager ('Guido1'). To prevent this, we now have MFA, multi-factor authentication. So if I open my laptop at 8:59 for a meeting at 9:00, I must not only remember my password ('BellaSwan12!!), but then unlock my phone ('1234'), open



Guido Camps

the authenticator app, give the Microsoft code – and go through this whole process again for every WUR application. And the icing on the cake is that you always spend 10 minutes wondering why on earth you haven't got access to Eduroam on your laptop: you forgot that you changed your password at the weekend after the final warning from WUR IT, so you can't get onto the internet. Hence my appeal in the interests of more freedom and just as much safety: WUR IT, can't we just have a simple, stable password? After all, we now have MFA. And if you don't trust my cybersecurity credentials, have a look at Microsoft's own Password Policy Recommendations:

- Don't require character composition requirements.
- Don't require mandatory periodic password resets for user accounts

Password expiration requirements do more harm than good, because these requirements make users select predictable passwords, composed of sequential words and numbers that are closely related to each other. In these cases, the next password can be predicted based on the previous password. Password expiration requirements offer no containment benefits because cybercriminals almost always use credentials as soon as they compromise them.

Guido Camps (39) is a vet and a researcher at Human Nutrition and OnePlanet. He enjoys baking, beekeeping and unusual animals.

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It's a steal at the self-checkout

Necessity, the fun of it, indifference, justice: students who shoplift in the supermarket have various ways of justifying their behaviour. And the introduction of the self-scanner is making it even easier to steal. The theft rate has increased a lot in recent years. Student editor Ananya Doraswamy talked to fellow students about why they steal and to Consumption sociologist Hans Dagevos.

Text Ananya Doraswamy and Luuk Zegers • Illustration Valerie Geelen

t's just an ordinary day in the supermarket. Steve (pseudonyms are used for the students in this article; their real names are known to the editors) is queueing at the self-checkout with a bag of crisps and a beer in plain view. What you can't see are the products he doesn't intend to pay for – he's hidden those in his jacket. A few minutes later, he walks out without anyone noticing what he's done. 'It started as a way of supplementing my small student budget,' says Steve. 'Nowadays I do it more for kicks; to see if I can beat the system and how far I can go. Stealing in the supermarket has become a habit for me. I ought to

stop doing it: I don't actually need to do it anymore for myself. Sometimes I take things for my housemates or friends who need something.'

Organic products

Steve is not the only one who occasionally steals from the supermarket. Shoplifting has increased a lot since the large-scale introduction of the self-checkout (see inset). Shoplifters often don't even bother to hide the items they are stealing like Steve did: they just 'forget' to scan certain products. Mark* is another student who shoplifts occasionally, mainly food items. 'The pricier

The rise in shoplifting

- ◆ Early this year, Jumbo supermarkets announced that more than 100 million euros' worth of goods was stolen from their 725 branches in 2023 amounting to an average of 140,000 euros per shop. That amount was the same as Jumbo's overall annual profits. Other supermarket chains don't publish any data about shoplifting, but nationwide police data show that it is a growing problem across the board. Managers of Wageningen supermarkets acknowledge that there is a problem here too, but prefer not to respond to *Resource's* questions and refer us to their head office.
- ◆ The self-checkout has become commonplace in the Netherlands since 2020. In 2023 in Wageningen, the number of shoplifting charges reached the highest point (97 charges) since the police started publishing this data in 2012. The years 2022 (84 charges) and 2020 (83 charges) are in second and third place.
- ◆ Between 2012 and 2019 (before the era of self-checkouts) there was an annual average of 51 charges of shoplifting in Wageningen. Since 2020 the annual average has been 81.
- ◆ Research by the RTL News panel (among 21,000 participants) shows that 7 per cent of consumers using the self-checkout deliberately take the odd item without paying for it. Among young people (18 to 35), the figure is 11 per cent.
- Jumbo has announced extra measures, including more camera surveillance. The chain is also experimenting
 with 'smart' camera surveillance which uses artificial intelligence to flag up suspicious behaviour.



organic products. I think the supermarkets calculate losses due to shoplifting into their prices, and they are also insured. And they throw out so much fresh food themselves – that is the real crime.'

Margot describes herself as an opportunistic shoplifter. 'I only steal occasionally. Actually only if the risk of getting caught is extremely small. If you get caught, you get banned from the shop and fined about 200 euros. So in a place like Wageningen, where there aren't many supermarkets, you've got to be careful.'

Expensive bananas

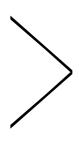
All three students say that they see shoplifting as unethical, essentially. They would never steal from a small retailer. But they don't feel that this principle applies to the big supermarket chains. 'Supermarkets make such big profits that it doesn't really matter what I steal,' says Steve. Margot: 'Some supermarkets, such as the AH To Go on the campus, have such high prices that they are practically daring people to start shoplifting. How can you justify charging one euro for a banana?' Mark too is not surprised that shoplifting

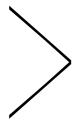
'The self-checkout has made the relationship between customer and shop even more impersonal'

'Supermarkets make such big profits that it really doesn't matter what I steal'

has increased. 'Everything has got more expensive in the past few years. Food shouldn't be allowed to be so expensive.'

'I haven't done research on shoplifting, so it isn't my field of expertise,' says Dagevos straightaway. 'But it is interesting to ponder it. I think that the self-checkouts make shoplifting easier; that consumers – including students – may be irritated by the rising prices, which make it easier for people to justify "taking something back" in their own minds; and that people increasingly see food as a standalone product, without seeing

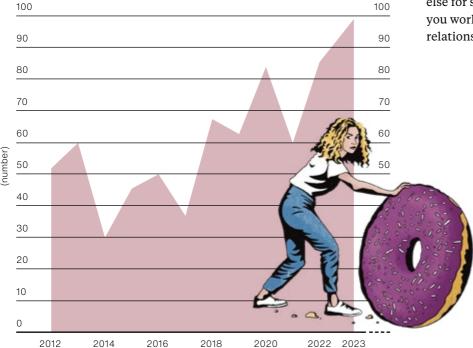




the links between food and farmers, nature, natural resources and animals.'

'And as a sociologist I am immediately reminded of the famous book The McDonaldization of Society, by the American sociologist George Ritzer,' he adds. 'Ritzer talks about "dehumanization": the way the cashier is replaced by the self-checkout in the name of efficiency.' The students who are quoted above see stealing from supermarkets as different to stealing from small businesses. 'That shows that people don't like large-scale retail,' says Dagevos. 'Retailers prefer to talk about the financial impact of theft, but there may be other hidden factors behind the increase in shoplifting. Everything has become anonymous: who on earth is Jumbo, Dirk, or Albert Heijn? Once you get rid of checkout operators, the shop becomes faceless. That doesn't make it okay to steal, but it helps shoplifters justify their actions to themselves.' Ritzer also introduced the concept of 'prosumption', says Dagevos. 'A combination of production and consumption. It includes all the developments towards self-service in the shop. Retailers present these developments as efficient and time-saving for the customer but there's something in it for them too: they can save on checkout personnel. Because we take over the checkout process from the supermarket, we are

Registered number of shoplifting charges Wageningen (2012-2023)



'Shoplifting in the supermarket has become a habit'

'Everything has become anonymous: who on earth is Jumbo, Dirk, or Albert Heijn?'

actually doing that work for them. I can imagine that some shoplifters use that as an excuse: if I've got to work for you, I want to get something out of it.'
All in all, many shoplifters are probably not in it for the money, suggests Dagevos. 'It's a relationship issue. The self-checkout has made the link between customer and shop even more impersonal than it already was. What is more, the self-scanner makes stealing a lot easier because the line between forgetting to scan something and intentional theft is fuzzy. It's easy to find an excuse.'

The measures announced by Jumbo supermarkets, with for example more and smarter camera surveillance (see inset), also fit the picture of McDonaldization, says Dagevos. 'Jumbo is opting for even more technology instead of seeing how they could improve relations with customers. One way of doing that is through initiatives with a social objective, like the staffed checkouts where lonely seniors can have a chat. You'd have to come up with something else for students, but with that kind of initiative you work on improving customer relations. If those relations improve, there will probably be less theft.'

NO MASSAGES IF IN DOUBT

The popular option of having a massage at the employer's expense will not be returning. It is not possible to fully guarantee personal safety, says human resources director Martijn Scheen. 'And the rule is: if in doubt, don't do it.'

The massages were suspended in July 2023 after reports of transgressive behaviour. Recently, the decision was taken to stop them for good, which led to a lot of comments on the intranet. At the request of *Resource*, Scheen explains the decision.

Why were there massages anyway?

'In the collective labour agreements, WUR agreed with the trade unions that it would spend a certain sum of money on secondary employee benefits. One of the aims is to keep staff healthy. In consultation with the unions, we decided in 2018 to offer relaxing massages. The availability of fruit at work is a similar agreement.'

Were there a lot of massages?

'About one in six employees (some 17 per cent) made use of the option. It started with chair massages at the office. During the pandemic, the possibility was introduced of having a massage at the masseur's practice. You got ten credits per year for 15-minute massages. In the masseur's practice, you could use several credits in one go. So you got fewer massages, but each massage was longer.'

Where did these incidents take place?

'Several incidents of sexually inappropriate behaviour were reported. These were serious incidents that came as a real shock to us. They involved the same masseur and took place in that person's own practice. After discussions with the Massageprofs organization, we decided to provisionally stop the service. We thought long and hard about this because we know how popular the massages were.'

Why are you now stopping for good?

'The Massageprofs masseurs are freelancers; they are not employees. They have a protocol for their work, but it was clear from our discussions with the director that there is not enough oversight or guidance of individual masseurs. We concluded we cannot guarantee personal safety sufficiently within this system. What is more,



Photo Guy Ackermans

Massageprofs' response to the incidents was not what we would have hoped. They did not take appropriate action after being told about the incidents.'

Is switching to another company an option?

'That is not so easy. There are not many companies able to deliver this service for an organization as big as WUR, and they all use freelancers. Also, providing massages isn't an essential service. The massages were mainly offered as a form of relaxation. Other solutions are more effective for treating and preventing shoulder and neck problems, such as good posture at work, physiotherapy exercises and taking breaks'.

Will you be introducing a replacement for the massages?

'We are still considering this. Massage chairs are an option, but you need the space for that and space is scarce. One suggestion is to have the massages in public areas, but not everyone feels comfortable with that. We are still talking to the unions about what we could do.' RK





Resume the agriculture agreement talks

THE DEBATE EVERY-ONE IS RUNNING AWAY FROM

'This event is not going to turn into an agriculture agreement 2.0,' facilitator Simone Ritzer jokes at the kick-off for the Dilemma Dialogue of 11 March. But by the end of the event, the participants felt a 2.0 version of the agriculture agreement wasn't a bad idea at all – as long as it wasn't steered by the government. 'Can't WUR take on a role in it?'



Text Marieke Enter

or the Dilemma Dialogue in
Omnia on 11 March, WUR
invited a mixed group of
roughly 140 stakeholders
in the Dutch agricultural, food and
nature sectors, from NGO staff to
pleople from local government and
individual farmers. The goal was to
find new possibilities for the future in
dialogue with one another and the team
behind the now renowned Dilemmas
document (entitled WUR perspectives on
agriculture, food and nature).
It seemed like the umpteenth initiative

in what has become a long series of meetings, dialogues, debates and the like. More talk, more consultations, and still nothing concrete. And there was some truth in that: this Monday afternoon in Omnia did not yield a solid solution to the deadlock, much to the disappointment of some. 'Honestly, I wonder. Here we are in the Mecca of agricultural knowledge; the dialogue on these issues has been going on for quite some time, and we still don't have any idea.'

Steering, but by whom?

There were some positive notes, though. 'I noticed we share a lot of viewpoints, even though we were a mixed bunch. The differences aren't so great at all. The reason we get stuck when it comes to

implementation has to do with a lack of leadership in my opinion.'

All those present agreed that government leadership is sorely needed, but no one appeared to believe that the government would rise to the occasion. 'A strong government brave enough to take the lead and make clear decisions would be great, but I don't see that happening. So, what are we going to do: wait until the government finally steps up, or get on with it ourselves?'

That discourse led to the suggestion that the researchers behind the Dilemma document should also focus on the crucial question of how you achieve the necessary changes. 'The governance aspect, so to speak. How can you ensure that changes are not only initiated but will also survive a few obstacles along the way?'

That contribution resonated with people. 'It's tempting to make bold decisions, as it at least provides clarity – for a

Four points of view

To kick off the dialogue, four different organizations shared their views on the six dilemmas in the WUR report: the Association of Young Farmers (Agrarisch Jongeren Kontakt), the supermarket sector association CBL, World Wide Fund for Nature (WWF-NL) and the Food Transition Coalition. The breakout sessions then focused on shared interests and underlying values.

'HERE WE ARE IN THE MECCA OF AGRICULTURAL KNOWLEDGE, BUT WE STILL HAVE NO IDEA'

while,' said one member of the audience. 'But after that, you just get stranded in social processes again. So I would like to propose trying once again to draw up an agriculture agreement. The first round failed, but perhaps a second attempt would be successful.' This suggestion was met with a lot of approving nods. 'But with a lesson learned because in the previous talks on an agriculture agreement there were no rules. And without rules, you get nowhere. I call on Wageningen to give this some thought.' This was not the only appeal made to WUR. 'There is much talk of how disappointing it is that the discussions on the agriculture agreement were stopped. Why don't we start again with a different, non-government instigator? Perhaps WUR could take the lead? There is a widespread sense of impatience.

Let's start working with those who want to get something going, even if it is just at a local or regional level, if a national approach is not an option. We have been in this impasse for so long now; we want to get out of it!'

Leads

The event was closed by Ernst van den Ende, one of the initiators of the Dilemma document. 'I heard a mixture of disappointment and impatience this afternoon, which I recognize. I, too, feel that WUR, as a knowledge institute, must address this debate that everyone seems to be running away from. We must feed it with the knowledge we have. Yes, it is still a search for answers, and decisions still have to be made. But I also see how WUR and the knowledge we have can contribute to these decisions being made. Many choices

and dilemmas are interlinked. We are trying to provide insight into that, for example through serious games or something resembling a voter's guide. What happens when you play around with the variables? That can help you make the necessary decisions.'

Dialogue rules

WUR organized the Dilemma Dialogue according to what are termed Chatham House Rules, meaning that the participants are free to communicate what was said but not by whom. These conditions also apply to *Resource*, which is why the statements in this article are not attributed, with the exception of Ritzer and Van den Ende.



Photo Shutterstock

EU rules for calculating the footprint of ornamental plants

How green are your tulips?

The European ornamental horticulture sector wants to become sustainable but so far has not had a standard method of calculating its environmental footprint. It does now. 'With FloriPEFCR, the sector has grown up.'

Illustration Tulipa sylvestris from Flora Batava

his Easter weekend there will be a vase full of tulips on many a table. But how sustainably are those flowers grown, actually? As a consumer you are often completely in the dark. Any grower can claim that a plant has been grown sustainably, and you have no idea how reliable that claim is, or whether one tulip is any greener than the next one. But last month, the European Commission approved FloriPEFCR, a standard set of calculation rules for the environmental impact of cut flowers and pot plants. If growers use it to calculate their footprint, the claims are reliable and easily comparable. The calculation rules are the result of a collaboration between Wageningen Economic Research, Royal FloraHolland, branch organizations, environmental analysts and banks. WUR researcher Roline Broekma picked roses in the greenhouses of the Noordoostpolder area herself as a teenager. For three years now, she has been leading the project as an expert in life cycle assessment.

What is so special about FloriPEFCR?

'Product Environmental Footprint Category Rules (PEFCRs) have to comply with European rules. For example, our consortium was only allowed to formulate the rules if at least 51 per cent of the market participated in



Text Stijn Schreven

the process. I am proud of the fact that we arrived at these rules in collaboration with so many stakeholders. With FloriPEFCR the sector has grown up: companies can no longer just use their own methods and make green claims – they follow a standard for the entire European market, so that you can compare the impact scores everywhere.'

How do you keep the rules objective with so many commercial interests involved?

'The EU's procedure provides for that: you can't operate in isolation. There were two interim rounds of consultation in which the calculation rules were made public. Everyone could comment on them and the consortium was obliged to respond to every comment. And three external reviewers assessed our reports. Finally, a technical council from the EU and a group of representatives from countries and NGOs checked everything and questioned us about our choices. In that regard, the product environmental footprint process is a big circus.'

What was the hardest part?

'What they term metrology of the sector: you have to assign specific figures or formulae to each step in ornamental horticulture. Take the combined heat and power system in the greenhouses, for instance. It needs gas to heat the greenhouses, but some of the energy it



PEF-CR

PEF stands for Product Environmental Footprint. It is an umbrella term for general rules that the EU has drawn up to standardize life cycle assessments (sustainability analyses) and to counter false claims. Then it is up to each sector to fill in the details of the calculation rules, the category rules (CR).

'With this standard for the European market, you can compare impact scores everywhere'



generates supplies houses in the neighbourhood. We had to figure out how you factor that in.

'A second example is the substrate the plants are grown in. Peat, potting soil and coconut fibre all have their own environmental impact for production and waste processing. Peat contains fossil carbon, for instance. If you use that, CO2 is released, but not all at once. How much of the emissions can be put down to the plant depends on how long you use the peat and what happens to it after use. After discussions, including with the

branch association for substrates, we decided to attribute all the emissions to the plant.'

What's the source of the biggest environmental impact of ornamental horticulture?

'For both cut flowers and pot plants, the cultivation and the distribution do the most environment damage. For instance: roses from the Netherlands and Kenya are similar in their total environmental impact, but with a different emphasis. The Dutch roses grow in a heated greenhouse, which uses gas and emits CO₂. In Kenya, you don't need that heat but you cause a lot of emissions if you fly the roses out to European markets.

For those aspects, companies have to fill in their own figures. That includes the harvest per hectare, litres of water, kilos of fertilizer, and kilometres per means of transport. Not every company has the expertise in-house to work with PEFCR itself, because it's quite a technical document. That's why tools are being created for calculating the footprint, even if you are not a sustainability expert.'

How will the consumer notice these rules?

'We are still in consultation with Royal FloraHolland about how the sector can best inform the customer about the score for the environmental footprint. Figures don't mean much to a consumer. You can also use categories, like the Nutri-Score for healthy food. But then you do have a dilemma: where do you draw the line between categories? You have to divide them so that not everything ends up in A or B, but also not in E. You want companies to have an incentive to reduce the impact of their products and get into a lower category.'

Is the EU going to make the calculation rules compulsory in ornamental horticulture?

'We expect that the EU will adopt the PEFCR as the standard for green claims. In the Green Claims directive proposal, PEFCR is the only method mentioned by name. But the proposal assumes that it will be used on a voluntary basis, whereas I think it will be large retailers like garden centres who will pressurize growers into using it, because more and more consumers are asking about the environmental footprint of plants. If that pressure comes from the market, companies will voluntarily calculate their footprint using FloriPEFCR.' And then the tulips on the table at Easter will hopefully become a bit greener every year. ■

Measuring biodiversity without diving

AUTOMATIC SAMPLING UNDERWATER

Marine biologist Reindert Nijland has developed a sensor box for measuring aquatic biodiversity. So divers are no longer needed.

o know what is going on below the water's surface, you have to take a look. Traditionally, that meant diving down. But the development of e-DNA (where 'e' stands for environmental) has revolutionized this field. Researchers can use the DNA in a water sample to deduce what forms of life are present. The biodiversity sensing box, the Marine Animal Ecology group's latest toy, marks a major advance in such measurements. Collecting and analysing e-DNA is a useful method but it has its limitations. You need to go down into the water to collect samples, but that isn't easy when the weather is bad or the location difficult to access. 'Anyway, it is only a snapshot,' says marine ecologist Reindert Nijland. 'It is just one point in time somewhere in the sea during high or low tide. Researchers prefer a series of measurements that show developments over time.' The

Campus ponds

The plankton microscope will soon be in operation on campus. Marine ecologist Reindert Nijland will be testing it in the campus ponds. The cylindrical device takes photos of the plankton passing in a clearly defined focal plane. What is more, the microscope calculates the plankton density based on the planar volume. Nijland: 'We already measure the e-DNA, including of fish. It helps to have images of the organisms too.'

biodiversity sensing box addresses those issues. The device is suspended or placed somewhere out at sea and then it takes samples automatically. The box was developed as part of the NLAS (Next Level Animal Sciences) programme. NLAS is a four-year Animal Sciences innovation programme with a budget of 12 million euros. Nijland's measurement device takes sensor technology to the next level.

Test tubes

'Although we didn't come up with the idea entirely ourselves,' Nijland confesses. 'You can buy the basic setup, which was developed in America to take plankton samples. It operates at depths of up to 5000 metres, which is overkill for use in the Netherlands. We replaced the filters



Text Roelof Kleis

for plankton with ones for e-DNA. We also added more equipment, such as a camera, a hydrophone and a plankton microscope, which lets us measure a lot of things at the same time.'

The core of the device is a grey metal cylinder containing a battery and a mini computer. It controls a pump that sucks in water and distributes it across up to 24 sampling test tubes. Nijland: 'You can programme it to take samples once an hour, once a day or whatever you want. The water passes through a filter in the mouth of the test tube, which collects the DNA. The DNA is then prepared and fixed using a special liquid to keep it in good condition for several weeks. The filters are collected and analysed in the lab.' The first tests have now been completed. 'We placed the device in the North

Sea south of Rotterdam, close to the Haringvliet inlet. Salt water passes when the tide is rising and fresh water when the tide is falling. That produces very different DNA pictures, a sign that the device is working properly. Interestingly, at one point you see a seal in the camera images and that is also reflected in the e-DNA sample for the same time point.'

'YOU CAN PROGRAMME IT TO TAKE SAMPLES ONCE AN HOUR, ONCE A DAY OR WHATEVER YOU WANT'

Local DNA

The match is not always that neat, of course. How can you tell whether the DNA that is detected comes from something close by? According to Nijland, DNA can stay intact for several days depending on local conditions. There are a lot of currents in the North Sea, so some of the DNA in the samples comes from further away. Can you distinguish between that and local biodiversity? Yes, thanks to time series. Nijland: 'If you take samples over a 24-hour period, you can filter out this background DNA as noise, leaving the local DNA as the signal. A student is currently working on this.' However, e-DNA doesn't tell you

everything about life in the oceans. The signal shows which species are present, but not the number of creatures per species. 'That is why we using other equipment too, such as a camera, which let us determine not just the organism's identity and sex but also numbers and

Wind turbines

The biodiversity sensing box opens up possibilities for new kinds of research. One of the projects the device will be used for is BeWild. In this project, WUR and its partners are working on methods for the remote measurement of biodiversity in the vicinity of offshore wind turbines.

dimensions.'

At present, the e-DNA is analysed in the lab, where the species are identified using DNA barcoding. A future step will be to do the analysis on site in the water. That would essentially turn the sensing box into a complete underwater lab. Nijland: 'So the camera will see something swimming past, the device will take a sample and 10 to 15 minutes later you'll get the result. That is where we want to get to.'



Marine biologist Reindert Nijland (right) and PhD candidate Niels Brevé with the sensor box on the Hinderplaat intertidal flats in Zuid-Holland. Nijland is developing the device to perform e-DNA measurements at sea • Photo Anne Reitsma

Six tips for a nature-friendly garden (or balcony)

It is spring and the dark months of sitting indoors are over. With a bit of luck you've got a balcony or a (shared) garden where you can enjoy greenery, sunshine and a cold drink. But how do you make sure your little patch of green is truly nature-friendly? Entomologist Hanneke Suijkerbuijk, landscape ecologist Nils van Rooijen and Urban Vegetation researcher Joop Spijker offer some tips. Text Coretta Jongeling • Illustration Shutterstock

1

Choose indigenous

Suijkerbuijk: 'The best plants for your garden or balcony are indigenous plants because they are connected with the insects here. That means not only that these plants can feed the local insects, but also that the nutrients become available at the right moment. Right now, for instance, you see a lot of European orchard bees, and their flight period will be over by May. So they need suitable food now. Indigenous plants and the insects that feed on them are well-matched: the plant can defend itself sufficiently to cope with being fed on, and the insects can get around the plant's defences well enough to get plenty to eat.'







Watch out for poison

Suijkerbuijk: 'The main thing to avoid is putting poisoned plants on your balcony or in your garden. Sadly, a lot of the plants sold in garden centres are grown using toxic substances that are still on and in the plant when you buy it. Even plants labelled bee-friendly can contain such toxins. So choose plants and seeds that are genuinely organic, then you are guaranteed that there's no poison on them.'

3

Let weeds grow

Suijkerbuijk: 'If you want to make a bare garden look nice quickly and cheaply, let weeds grow. When a weed is still a tiny plant with a couple of leaves, you can use an app like Obsidentify to see which plant it is. Do you think it's an attractive species? Then let it grow, or dig it up and transplant it somewhere else. Dandelions, for instance, are a good food plant for insects because they produce a lot of nectar and pollen.' Van Rooijen: 'Last year I let a bryony, a classic weed, grow in my garden. When it came in bloom with greenish, unobtrusive flowers, it was buzzing. It turned out there were bryony bees on it, a red-list species. They can find that one plant in no time.'

4

Make a pond

Suijkerbuijk: 'A lot of insects, like dragonflies and green lacewings, spend part of their life cycle in water. If you've got room for a small pond in your garden, they can live there – and it doesn't have to be very big at all. Put in a couple of aquatic plants and it soon becomes a little ecosystem. It's not such a good idea on a balcony, though – mosquito larvae like living in water too, and from the balcony they'll get into your bedroom very easily.'

5

Keep it feasible

Spijker: 'To be honest, I'm not much of a gardener myself. I can talk about it all right, but for myself I have to be a bit practical. If you don't have much time, plant bulbs. They come up again every year. I've got bulbs and a buddleia on my balcony. I live on the sixth floor and a lot of insects find their way to it.' Van Rooijen: 'You don't have to do an awful lot in your garden. Messiness is very good and a lot of the plants that we see as weeds flower beautifully and attract insects. It doesn't have to be mown and hoed all the time. In fact, hoeing only leads to more weeds.'



With an environmentally friendly garden, you don't just make the insects and other animals happy, but it's good for you too. Spijker: 'Research I've been involved in has shown that people with a nature-friendly garden have fewer health problems like strokes, cardiovascular disease and bowel infections. And a nature-friendly garden is also more climate-proof. In a hot summer, it can be up to 10 degrees cooler at night, and when there is a lot of rain, some of the water infiltrates the soil so the sewers don't overflow so fast.'

Van Rooijen: 'If you want to get the most out of your garden, go for biodiversity. The basis is a lawn that you allow to get a bit overgrown. Step two is to dig a pond (see tip 4). And then you can plant a tree and some shrubs. If you want to go further than that, build a little wall, leaving gaps in it. And have a pile of wood with a few branches for creatures to shelter in. Like that you get a tremendous diversity of mini-landscapes with gradients between them, creating transition zones. Biodiversity peaks when there are a lot of gradients in a small environment.' Suijkerbuijk adds: 'Pay attention to flowering times too. If you have plants flowering in spring, summer and autumn, then there is something for insects all year round. You can also consider having a mix of plants that flower by day and by night. The evening primrose, for instance, is very suitable for moths. Another advantage of diversity in your garden is that you reduce the risk of pests. Maybe one bush will get covered in aphids, but if you don't have a whole row of the same plants, there isn't much risk of the aphids transferring from plant to plant.'

'A reason to get out of bed in the morning'

THE BENEFITS OF CARE FARMS

The Dutch public broadcaster KRO-NCRV recently filmed the series *Out of Office* in which people suffering from a burnout spent six months working on a care farm. They found it a calming experience and appreciated the structure and space to work on themselves. No surprises there, says Marjolein Elings, a care farm researcher at WUR. 'The care farming concept has so much more potential.'



Text Dominique Vrouwenvelder

ive dull thuds of iron on iron reverberate around the yard of De Hoge Born care farm. Finally, a dry day with not a cloud in the sky. It is ten thirty and time for coffee. Everyone stops work promptly and walks over to the canteen.

Marjolein Elings, who researches care farming, regularly visits De Hoge Born care farm, which is located on the Bornsesteeg just past the Unifarm fields. It is busy when we meet up with her there. 'Originally, this was the university's experimental farm,' she explains. 'WUR used to do field trials with potatoes. When the university no longer needed the land, various

groups joined forces with the idea of setting up a care farm.' People working on the farm who pass by all give Elings a friendly greeting. 'For some participants, their work here gives them a reason to get out of bed in the morning,' says the researcher. WUR has been researching the health effects of working on a care farm for over 20 years. 'The sector has grown a lot in that time, from 75 care farms in the Netherlands in 1998 to more than 1350 today,' says Elings. 'People often associate care farms with overprotective day care for people with intellectual disabilities. But it hasn't been like that for a long time. The groups working on care farms include elderly people with dementia, youngsters with behavioural problems, adolescents who have dropped out of school and people recovering

from a burnout, as in that TV series. And they can all benefit a lot from the experience, as we have shown in various studies.'

School dropouts

The Netherlands is a trendsetter in care farming. 'As researchers, we work closely with the Agriculture and Care Federation, an association representing some 900 Dutch care farms. The Federation tells us what questions the sector has and then informs its members of our research results.' The way farms have been embedded in the Dutch healthcare system is attracting interest abroad too. 'We are regularly invited to give talks or workshops for politicians and policymakers in other countries.' Elings has been studying the effect of care farms on their participants - including at De Hoge Born - since 2002. 'This isn't a case of studying clearly defined interventions because participants differ in the work they do and how much time they spend on the farm. Also, participants

'WE REGULARLY GIVE TALKS TO FOREIGN POLITICIANS AND POLICYMAKERS'



Care farm, De Hoge Born, Bornsesteeg in Wageningen ◆ Photo Guy Ackermans

'WORKING WITH PLANTS AND ANIMALS FEELS MORE WORTHWHILE'

have a life outside their work on the farm, which can affect their wellbeing too. That can make it difficult to quantify the effectiveness of this form of care.' 'However, our research shows that participants are revitalized by a spell on a care farm,' continues Elings. 'For example, elderly people with dementia consume more food than they do when in regular day care. And youngsters with behavioural problems have more self-confidence after a care farm programme and are less likely to get into trouble with the police.'

One of her colleagues recently published a report on the use of educational care

farms for children who have dropped out of school. 'These children feel safe and noticed on a care farm, which has a calming effect on them. Many of the children who go through this programme are then able to return to the regular education system.'

Mental health

The main focus in Elings' own research is people with psychiatric or addiction problems. She uses questionnaires, in-depth interviews and focus group discussions to explore the mental health and social functioning of the participants. 'Participants say the work on the farm makes them feel fitter because they are physically active. They develop self-confidence, self-respect and a sense of responsibility, and they feel useful.

We also find people who are working at a care farm get better at looking after themselves, for example because they learn how to cook. What is more, we see a reduction in their use of medication and the number of contacts with care providers. People feel less stressed and are calmer. These are positive results.' One of the participants studied by Elings is Marcel (56). He first attended De Hoge Born seven years ago. He was forced to move house due to circumstances and ended up in Wageningen. 'I am susceptible to psychoses and there have been a couple of occasions where I got completely out of control. What people like me need is a calm environment and structure. And we get that here. I used to

be a participant and now I'm a volunteer. This place helps me stay stable mentally. We pay attention to what we eat and drink, we have a structured day and a supportive social group.'

Flying off

Marcel shows us a colourful painting on the building next to the chicken shed. 'This is where the eggs are cleaned and stamped. The building was looking a bit dilapidated from the outside, so I was allowed to paint it,' he says proudly. Now one wall has a cheerful rainbow arching over a collection of trees and bushes. He also painted a small owl. 'That is the unofficial De Hoge Born mascot. Every year, owls build a nest in the farmyard. We see the owlets grow big and then fly off.' The owls are a fitting metaphor for the participants who attend the care farm. Marcel's story is similar to that of a lot of care farm participants, says Elings. 'Their self-confidence gets a boost because they

get positive experiences in caring for animals or growing crops. And the fact that participants are expected to turn up to the farm also helps their self-respect and makes them feel part of a wider community. You see them grow in their social skills.'

The work on the care farm has a positive effect not only on the participants but also on the volunteers working on the farm. Elings: 'We are currently seeing an increase in mental health problems, a sense of loneliness and a lack of connection and meaning in life. We recently held interviews with care farm volunteers and asked them what the farm meant to them. Their replies showed the farm environment also helped them to feel accepted, as somewhere they could be themselves.'

Elings sees that as the real strength of care farming. 'Working with plants and animals feels particularly worthwhile. It is different to ordinary volunteer work or traditional forms of day care. One participant said recently, "I have all these worries going through my mind but then I work on the farm and I see everything just carries on – the birds build their nests, along comes spring, summer, autumn

and winter, and nature just does its own thing." People feel part of a bigger picture here, where they can do their bit. That has a huge positive effect.'

Elings believes the potential is even greater. 'Care farms could help improve the food supply chain, not just in the sense of bringing the food closer to the consumer, but also by bringing the consumer closer to the food. Most consumers don't know enough about what goes on in farming. Care farms bring volunteers, relatives and other people to the farm and can therefore help bridge the gap between agriculture and society at large. That can be in both directions: consumers get a better picture of farming and farmers are better informed about consumer concerns.'

Creating something

Marcel is certainly committed to staying on at De Hoge Born. 'I like working with the soil and plants,' he says. 'Something happens when you sow seeds, though you still have to give the process some attention. The soil seems dead in winter, but when you sow you discover how much the earth is capable of.'
'People curious to know more about De Hoge Born are always welcome,' says Marcel. 'There is a sign saying "farm shop" next to the bridge over the Forum pond that points to us. You can shop here, have a cup of coffee on the patio or chat to the people working on the farm.'



Painting by volunteer and former participant Marcel on the building next to the chicken shed. Photo Guy Ackermans



You can see great-looking people on Wageningen campus. In this column, we put one of them in the spotlight. This time, meet Joshua van Aswegen, an Environmental Sciences Bachelor's student from South Africa. Text and photo Linde Klop



'Before Covid I was a very reserved person, someone who wanted to blend in, not stick out. I wore clothes that resembled pyjamas rather than outfits, and felt like I was breaking fashion boundaries when I wore a simple flannel. But when the whole world stood still during lockdown, I started scrolling. TikTok became my source of inspiration and movies started guiding my aesthetic. During that time, I discovered that fashion was an art form. Clothing provides a medium through which to present yourself, a tool to show your personality even to passing strangers. With newfound interest I delved into second-hand shops and discovered my thrift gift, an ability to scavenge through endless racks to find that one item that enriches my wardrobe. Now I plan my outfits days ahead, fearing nothing more than repeating something I've already worn. When I was younger, I had to wear a uniform to school, so now uniformity is my biggest enemy. My whole demeanour has changed since I started dressing the way I do now. I feel more confident and outgoing. All of a sudden, I was surrounded by a great group of like-minded people, all with fantastic personalities and incredible fashion sense. And although I love it when they compliment me on my outfit, nothing is better than a simple "I like your shirt" from a stranger. But my favourite thing is seeing my little brother going through the same metamorphosis that I had when I was his age. At least, as long as he doesn't start stealing my stuff.'

You encounter all the flavours of the world in our WUR community. Salma Rian, an Agricultural Biosystems Engineering PhD candidate from Morocco, shares a recipe for almond briouat.



Almond Briouat

'In Morocco, culinary traditions come alive during Ramadan to satisfy everyone's craving for something sweet after fasting. If I could summarize Ramadan in one taste sensation, it would be almond briouats. When I was a kid, I would bake them with my mum. She called them God's reward for controlling your cravings for a full day.'

Preparation

- 1 Soak almonds in hot water for a minute, then cool and peel by squeezing them between your fingers.
- **2** Roast almonds on a tray lined with baking paper until lightly golden.
- 3 Process the almonds, 1 tbsp orange blossom water, sugar, cinnamon, salt and half the butter in a food processor until a paste forms.
- **4** Take teaspoon-sized balls of the paste and shape into a small triangle.
- 5 Once the pastry is fully defrosted, cut into strips (depending on the size of your almond triangle). Melt the remaining butter and brush the centre of each strip with butter. Place a triangle of almond paste at one end of the strip.
- **6** Fold the strips around the almond paste triangles following the instructions via the QR code.
- **7** Heat the oil in a frying pan and fry the briouats on each side until golden brown.

Ingredients (for 2 persons):

- Roll of filo pastry
- 4 cups of raw almonds
- 2 tbsp orange blossom water
- 1 cup of granulated sugar
- 1 tbsp cinnamon
- · A pinch of salt
- Half a cup of butter at room temperature
- 1 cup of honey
- 2 cups of vegetable oil
- 8 Transfer the almond briouat immediately into another pan over medium-low heat containing the melted honey and remaining orange blossom water.
- **9** Flip the briouats to coat them fully.



Salma RianAgricultural Biosystems Engineering
PhD candidate from Morocco

Scan the QR code for folding instructions, garnishing tips and a recipe for the traditional Moroccan dish msmen, from Food Safety student Zaineb Louchahi.

Limelight



Not much culture in Wageningen? Not true! This regular column puts WUR's many creatives in the limelight. There are people out there making music, reading poetry, dancing, juggling and doing stand-up comedy. In fact, in Café Loburg you can experience all of the above in one evening.

Text Steven Snijders

THU 04-04-2024

Café Loburg (Molenstraat 6) 20:15 to 23:00 hours Free admission

Cultural Café

Every first Thursday of the month from October to April, the Cultural Café foundation organizes an evening full of culture in Loburg. 'As a Wageningen resident, I find it important to have a wide variety of culture on offer,' says co-host and foundation chair Yvonne Bik. The programme always features a range of acts, with no two evenings the same. You can see singer songwriters, socially engaged music, comedy, dance, poetry, choirs, violin quartets

and juggling acts. The evening always includes a performance by the city poet and a columnist. And it always ends with a band. 'The foundation was set up 40 years ago. We will be celebrating that anniversary with a special programme in November.'

Bik grew up in Wageningen. Her day job is as an advisor on external training for the tax authority. 'That might seem rather far removed from co-hosting Cultural Cafés, but it isn't really. Both are about focusing on others and trying to find things out by asking questions.' Anyone can apply to perform in Loburg; just go to cultureelcafe.eu. Students take part sometimes too, and can pack the room with their fans. Bik: 'I have been working for the Cultural Café foundation for nearly eight years now. I really enjoy it, and our evenings are always very entertaining and sociable. The 4 April programme includes pop and soul covers by the band The Meeting, piano music by Tessa, poetry from city poet Bob ter Haar, a monologue by Bob Vink and accessible country-folk songs from the band Cortez.'



Meanwhile in... The USA

WUR is incredibly diverse, with hundreds of internationals working and studying here. In the Meanwhile in column, we ask one of them to comment on certain events in their home country. This time, Environmental Sciences Bachelor's student Ryland Barton (20) from the US shares his views on WikiLeaks founder Julian Assange, who is fighting extradition to the US.

Text Youssef Khattabi

Barton: 'Julian Assange, the Australian WikiLeaks founder, released classified American documents about the Iraq and Afghanistan wars in 2010. He is currently in prison in the UK, fighting extradition to America. It's a complex case that shows the tension between the public's right to information and the government's need for secrecy.

Assange's release of those documents aroused a complex mix of emotions. Many people, myself included, see the war in Iraq as a misjudgement and Assange's actions as a necessary revelation of the truth. The portrayal of Assange in the US media has varied, with some stories portraying him as a victim of political machinations. Given the polarized nature of media representations, I find it difficult to take a strong position. The press plays an indispensable role in safeguarding freedom.

There is a need for investigative journalism to keep various powers in check. Yet there's also the question of what should remain confidential in the public interest.

I don't really remember the impact WikiLeaks had in 2010, as I was only seven. However, I still remember the 2013 case of Edward Snowden, which is similar to Assange. Some of my relatives were angry because they believed he was some kind of traitor to our country.

I view Assange's potential trial with a pragmatic eye, emphasizing the legality of the actions rather than the moral debates surrounding them. It is illegal to hack into government computers and leak sensitive information. I think the US plays a dual role, on the one hand being the champion of freedom and on the other hand having moments of moral ambiguity. This highlights the complex balance between upholding liberty and managing national security interests.'

[column]

WARRIORS

There are some parts of life that are similar among lots of people. Factors that shape what we do belong to most people's realities. One of them - money - is quite high on the list of human necessities. Recently I read somewhere that 'money trauma is real', and I couldn't agree more. The stress and lack of energy it can bring upon the body and mind can be very shocking. This applies even more to those of us who come to Wageningen from very different places and cultures; the intersection of struggling for money while being in a place that is not your home can be twice as scary. So, fellow internationals, here is a big cheer for your strength and resilience. Thinking, for example, about my journey, one shared by many, having a job was sometimes not an option but a necessity to afford to study. Then there are those of us who cannot afford a trip with friends or one that would complement our studies. Here is to all of us brave souls who somehow manage to function even with less than five euros in our bank accounts. All of that is a cloud of worry that hovers over us daily, fogging the mind and preventing us from being able to relax and enjoy all those things that are indeed present. But also (adding some irony to the situation) affecting the clarity with which we can do that very thing that we fundamentally came here for: to study.

For all these reasons and many more, which I will not analyse (yet) because I would risk becoming too political, I will say that people who have financial difficulties but still manage to find a balance between having a life and getting a degree are serious warriors. They do not just survive but usually thrive despite the adverse conditions they have to navigate through, and whoever you are, you're not alone!



Nefeli Nisioti (26)

Nefeli is a new *Resource* columnist and a secondyear Master's student in Forest and Nature Conservation. She loves considering things from many different perspectives until she gets lost in the process, but she loves that too.



Colophon

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'If you start playing your April Fools' pranks on 1 March, the surprise effect will be greater. And so therefore will the laughs. • Photo Shutterstock



APRIL FOOL'S JOKES **EARLIER IN THE YEAR**

Phenologist Arnoud van Vliet thinks humans need to adapt more to nature.

t is part of the springtime ritual: April Fool's Day on 1 April, when we play jokes and pranks on one another. But is that still an appropriate date? No, says phenologist Arnoud van Vliet. Spring is starting earlier and earlier, so he says we need to bring April Fool's Day forward too. For decades, Van Vliet has been monitoring when the first snowdrops peep up above the ground, when the first crocuses appear and when willows start flowering. Nothing escapes the eagle eye of the Wageningen phenologist. And his conclusion is clear: nowadays, spring arrives some five weeks earlier than in the past. According to Van Vliet, humans need to adjust too. 'We will have to keep up with this rat race we ourselves set in motion. In the past, 1 April was when spring was just starting. Everyone was in a good

mood, which is the perfect condition for a practical joke. I personally have fallen for them many a time: hey, you've got a hole in your trousers! Ha ha ha, that one always works. Especially if it's not true, of course.

But the times are changing, as Van Vliet knows better than anyone. That is why he came up with the plan to bring April Fool's Day forward. 'I propose making it 1 March. That will be OK for the time being at any rate. We can call it something like March of the Fools.' Van Vliet wants to announce his plan in style next Monday.

The inventive phenologist points out another benefit to bringing April Fool's Day forward. 'On 1 April, you basically expect to get taken for a ride. If we shift it to 1 March, the surprise effect will be much bigger. And so, therefore, will the laughs. I tested it out on my own wife at the start of the month. Honey, there's a ladder in your tights. It didn't work so well because it happened to be true. But even so.'

> 'I propose making it 1 March. We can call it something like March of the Fools.'

Elaborating on the idea, Van Vliet ponders whether we could bring the May break forward, or officially shorten winter and have summertime start on 1 February. 'We have no option really. Nature is not hanging around.