

**50 million kilometres**

WUR staff fly around the world  
1250 times a year | **p.4** |

**Harry Potter cup**

Magical material changes  
colour | **p.10** |

**Playing dead**

Climate activists hold Die-Ins  
on campus | **p.27** |

# RESOURCE [EN]

For everyone at Wageningen University & Research

no 13 – 7 March 2019 – 13th Volume



**‘Hard work and  
no fat pay check’**

But student Jelle still wants to be a farmer | **p.12**


**INTERNATIONAL  
EDITION**

# John + Caperlan wading suit

John Beijer, aquatic ecologist



## KEEPING DRY IN THE WATER

It's a great suit: flexible and light. It keeps you dry when you wade through water, even chest-deep. John Beijer always keeps it in his car boot. You can often see him in it, standing in the ponds around the Forum as he collects water animals, plants and sludge for teaching and research purposes. The mix of species says a lot about the water quality. But sometimes he just goes out to catch and watch the creatures. Always a hit at open days.  RK, photo Sven Menschel

# >> CONTENTS

no 13 – 13th volume



>> **8**  
**VELUWE WOLF CUBS**  
 It could happen this spring



>> **18**  
**PROVINCIAL ELECTIONS**  
 What is at stake for WUR?



>> **23**  
**HEALTH PHILOSOPHY**  
 'It is not true that your lifestyle is your own free choice'

**AND MORE...**

- 5 Wouter Hendriks to be Dean of Research**
- 6 Province invests in OnePlanet**
- 7 Stalker threatens staff**
- 8 Why the faraway holidays?**
- 9 'Warm spring is risky'**
- 10 'Rules on bone meal could be relaxed a bit'**
- 26 International Club open again**
- 27 Meanwhile in India**

## IT TAKES COURAGE

My mother grew up on a farm in the east of the Netherlands, but left the countryside for 'metropolitan' Wageningen. She met my dad here, so if she had stayed in the countryside, I wouldn't exist. And yet I still sometimes wonder what my life would have been like if I'd been born on a farm. Would I have become a farmer? In my dreams, it's a lovely life: plenty of fresh air, driving the tractor across my field, taking care of a few animals, producing milk and with a bit of luck, making delicious farmhouse cheese. In reality, though, there is a lot more to it. There are more and more rules and regulations and you face critical consumers who want three 'Better Life' stars for a bargain price. And you have to work your socks off for a product that gives you a minimal profit margin – a bit of bad luck, and you can't afford a holiday. It takes courage to go into farming. And WUR student and farmer's son Jelle Jolink has that courage. Challenges are there to be solved, he thinks. So that's what he is going to do, because being a farmer is – in his words – 'great'.

*Luuk Zegers, education and student life editor*

>> [Keeping chickens under the trees is good for the climate | p.20](#)



# Between them, staff fly around the world 1250 times

## WUR WANTS TO CURB FLYING

**WUR staff fly too much. And for destinations within Europe, they often take the plane unnecessarily. That has got to change, says the Executive Board in the new Mobility Vision 2030.**

The number of flights taken by WUR staff, the kilometres flown, and with them the greenhouse gas emissions caused, have gone up in the past decade, whereas staff numbers have gone down. Between them, WUR staff now fly around the world about 1250 times a year.

This must change, says the Mobility Vision. The Executive Board wants to cut CO<sub>2</sub> emissions from business trips and commuting by two per cent per year by 2030. And the main target here is flying, says policy officer Erna Maters (Facilities & Services, Corporate Social Responsibility). ‘You can only achieve a two per cent reduction in emissions by flying less.’

Less flying within Europe, for instance. WUR’s travel policy states that staff should not fly to European cities which are easily reached by train, such as Brussels, Paris and Stuttgart. In practice,

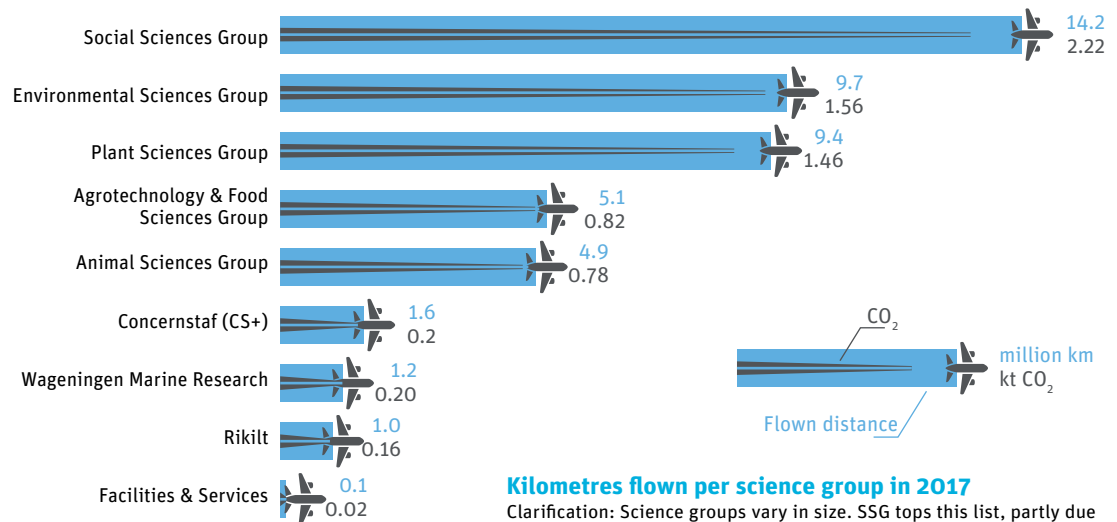
this is widely ignored, shows a survey by Facilities & Services. In 2017, more than 660,000 avoidable kilometres were flown within Europe. Hundreds of flights were taken to Paris and Stuttgart alone.

To curb flying within Europe, Maters suggests working with ‘green’ and ‘orange’ lists of cities – those for which train travel is compulsory, and those for which

it is ‘preferable’. The University of Ghent already uses such lists, says Maters. ‘The Sustainable Mobility working group is working on arranging this as quickly as possible. It also needs to be made easier to book a train journey.’

But the CO<sub>2</sub> emissions from all those avoidable European flights are actually quite

negligible: 200 tons. This would just about achieve the reduction target (two per cent per year) for a single year. Further reduction will therefore have to come from cutting down on intercontinental flights, which account for about three quarters of the emissions. The Executive Board therefore wants to promote the use of tele- and videoconferencing. **Ⓡ RK**



### Kilometres flown per science group in 2017

Clarification: Science groups vary in size. SSG tops this list, partly due to the contribution of Wageningen Centre for Development Innovation (CDI). In the conversion to CO<sub>2</sub> emissions, the fact that emissions vary with the kind of flight (regional, continental and intercontinental) was taken into account.

## DAVID COOMES IS ‘BIG BROTHER’ IN THE FOREST

**Forest ecologist David Coomes will be the keynote speaker at the WUR *dies natalis* on 11 March, instead of Rory Wilson. The British scientist will explain how he uses remote sensing and laser scans to ‘spy on’ tropical forests.**

The British field ecologist Rory Wilson, a pioneer in tagging wild animals, is unable to speak at the *dies* for health reasons. Coomes, professor of Forest Ecology and Conservation at the University of Cambridge, will do the honours. The ecologist ex-

periments with new techniques for answering ecological questions, says Martin Herold, professor of Geo-information Science and Remote Sensing in Wageningen. Laser scans and spectral techniques, for instance, give Coomes three-dimensional images of tropical forest, so that he can measure how the trees grow, how they compete, and how forest and climate affect each other. Ultimately, he hopes to answer the question why the forest looks the way it does.

Three Wageningen scientists will present their research as well. Lammert Kooistra of Herold’s group will reveal how he monitors the development of marram grass in the Dutch dunes using drones. Jasper Eikelboom of Resource Ecology will talk about how he maps the spatial distribution of animals in African game parks using remote sensing. And Brenda Walles of Wageningen Marine research will present her research on the use of artificial oyster banks as coastal defences in Zeeland. **Ⓡ AS**



▲ David Coomes will speak at the *dies* instead of Rory Wilson.

PHOTO: UNIVERSITY OF CAMBRIDGE

# HENDRIKS TO BE DEAN OF RESEARCH

**Professor of Animal Nutrition Wouter Hendriks will be the new Dean of Research from 1 April. He succeeds Richard Visser, who stepped down on 2 January.**

Hendriks' responsibilities as Dean of Research include promotion policy. He will also advise the rector on Wageningen University's research policy, and oversee the quality and integrity of the research. Hendriks: 'I want to focus on continuing to improve the research quality, and on closer collaboration between

Wageningen University and Wageningen Research. I also want to improve the visibility of the position of Dean of Research both within and beyond WUR.'

The post is part-time, for two days a week. Hendriks will still hold the chair at the Animal Nutrition group. He will have office space in Atlas in the department of Corporate Strategy & Accounts (CSA), and will be supported by the planned new Dean's Office, made up of one operational assistant and three policy advisors. **TL**



PHOTO: MIRIAN HENDRIKS FOTOGRAFIE

## IN BRIEF

### >> MEATLESS WEEK

#### But with meat

WUR is taking part in the National Week without Meat from 11 to 17 March. During this week, meat-eaters in the WUR canteens will be invited to try healthy, tasty alternatives. To that end, there will be more vegetarian options on the menu than usual. But meat dishes will still be available: people are free to decide for themselves how much they participate. A dossier will be published on wur.nl with Wageningen research on meat consumption, health and sustainability. The instigator of the Week without Meat was Isabel Boerdam, known for her blog and book *De Hippe Vegetariër (The Hip Vegetarian)*. **LZ**

### >> FAMELAB

#### Two from Wageningen in the finals

Postdoc Daniel Reyes Lastiri and PhD student Elbrich Postma have got through to the national finals of Famelab. On Friday 1 March, the young researchers won the preliminary round of the science communication competition in De Wilde Wereld theatre in Wageningen. They had three minutes to present their scientific idea or concept. Postma talked about her research on the senses of smell and taste. 'One in six people can't smell very well. My idea is to see if training can change that.' Reyes Lastiri presented his ideas on aquaponics, a combination of fish farming and horticulture. 'I talked about the current state of global food production and the alternative offered by aquaponics.' **LZ**

### >> INREF

#### Four new projects

Smart farming in Indonesia, serious gaming for forest management, fermented foods for Africa and biodiversity conservation around the Nile. These are the topics addressed by four new projects to be funded from the Interdisciplinary Research and Education Fund (Inref). This Wageningen University fund is intended for interdisciplinary doctoral research geared to achieving the UN's Sustainable Development Goals (SDGs). **TL**



PHOTO: NIELS MULDER

▲ Winners Daniel Reyes Lastiri and Elbrich Postma receive their prizes.

## © COLUMN | GUIDO

### The role of the media

A television show called Rambam shook the nutrition world on 24 January with a programme about market research. Mainly, I heard people talking about two anonymous professors who had apparently been lured by a big bag of research funding into presenting positive 'research results' about an energy drink. Personally, what bothered me was something else in the programme.

The presenters carried out their own poor study (their own words), to see whether it would make the news. When their nonsense study was quickly picked up on by a few media outlets, they concluded that it was shockingly easy to use research results as a marketing tool. Rambam focuses in the programme on researchers and research institutions, but does not look at the role of the media in spreading news of poor research, and reporting on good research poorly.

On the same day the programme was broadcast, there was an article on the website of the Dutch newspaper *Algemeen Dagblad* about a Belgian study on sea air and cancer cells. The researchers themselves were cautious: 'Sea spray was tested on cancer cells on dishes in the lab. You've got to take 100 further steps before something like that really works. The headlines now say: sea air helps against cancer. But of course you can't say that on the basis of a lab study like this.' And what was the AD's headline about this study? 'Breathing in sea air helps against cancer and high cholesterol'. Perhaps the TV journalists at Rambam could turn their gaze on their own media colleagues at some point. **©**

**Guido Camps** (34) is a vet and a postdoc at the Human Nutrition department. He enjoys baking, beekeeping and unusual animals.



# GELDERLAND INVESTS 65 MILLION IN ONEPLANET

**A new research institute is coming to the Wageningen campus: OnePlanet. Gelderland Provincial Council voted by a large majority to allocate millions to this initiative. There will be a subsidiary branch in Nijmegen too.**

After months of discussion, 44 out of 55 Provincial Councillors voted on 27 February in favour of supporting the new innovation centre to be set up by WUR, Radboud University Medical Centre, Radboud University and the Belgian research institute IMEC. Only two parties voted against it, the populist PVV and the socialist SP.

Most of the parties were enthusiastic about what OnePlanet claims to offer on the cutting edge between digitalization and agri-food and health research. 'OnePlanet is going to have a big impact on the competitiveness and innovative capacity of the food and health sectors,' says right-wing party VVD spokesperson Rene Westra. Gelderland is giving 65 million euros over a period of eight years. According to the business plan, a further 81.5 million euros

needs to come from other institutions, government bodies and businesses in those eight years.

WUR Executive Board member Rens Buchwald is excited about the broad support for the plan. 'It is not just the coalition parties that support it, but a lot of the opposition as well. When the opportunity arose to work with IMEC and Radboud, we were very positive about the possibilities. It fits very well within the WUR strategy of looking for scientific partners on the edges of our domains so we can reinforce each other.'

Many parties, particularly the left-wing PvdA, the green GroenLinks, and the animal rights party PvdD, said they had been troubled by the size of the investment. There were also some doubts about exactly what social impact the initiative would have. 'Even if half of this dream is realized, we'll have achieved a lot,' says PvdA spokesperson Fokko Spoelstra. 'On the other hand: it is a large sum of money. Aren't there better ways of using it?'

The coalition party PvdA was convinced part-

ly thanks to the many improvements that were suggested by different parties over the past six months. Many parties thought it was essential that the new institute should work with vocational and higher educational institutions, and with SMEs. The initiators have established these links to the satisfaction of most of the parties.

Innovation Centre OnePlanet will be located on the Wageningen campus, with a subsidiary branch in Nijmegen. The plan is to grow from a staff of 35 in 2019 to about 120 in 2028. The first staff will start out in Impulse.

OnePlanet aims to develop innovative solutions in the fields of Data Driven Nutrition & Health, Citizen Empowerment, Precision Production & Processing and Tailored Supply Chains. The application of nano-electronics and digitalization is key. The Belgian research institute IMEC, with its 3500 employees, is the largest independent European research centre in the field of micro-electronics, nanotechnology, design methods and ICT. **AVE**

## VICI GRANTS FOR RESEARCH ON SEEDS AND DELTAS

**The Wageningen scientists Leónie Bentsink and Ton Hoitink have both won a Vici grant of 1.5 million euros.**

Bentsink is doing research on the influence of mRNAs on the lifespan of seeds, and Hoitink is looking at how the loss of a foreshore disturbs the sediment balance in deltas. With their Vici grant from the Netherlands Organization for Scientific Research (NWO), they can now build up their own research groups over the next five years.

You can keep seeds for years and they will still germinate, thanks to special proteins formed in the seed. Genetic material in the DNA of the plant is converted into protein through Messenger RNA (mRNA). 'What is extraordinary is that this mRNA is normally

short-lived,' says Leónie Bentsink of the Laboratory for Plant Physiology. In a bacterium, it lasts only a few minutes. 'We would very much like to know why mRNA stays good for so long in seeds.'

Foreshores in river deltas – shallow intertidal zones that are periodically under water, are being lost to land reclamation and rising sea levels. 'This is changing the tides in the delta and the transportation routes of sand, sludge and clay,' explains Ton Hoitink of Hydrology and Quantitative Water Management. 'That causes problems such as the silting up of shipping channels, riverbank erosion and turbidity. We want to understand this mechanism. That understanding can then form the basis for guidelines for a sustainable design for waterways and foreshores.' **TL**



PHOTO: SVEN MENSCHER

### Make a placard

In preparation for the national teachers' strike on 15 March, the action group WOinActie Wageningen ran 'Make your own placard' workshops in WUR canteens last week. The strike is in protest against budget cuts and work pressure in higher education. Lecturer in Rural Sociology Jessica de Koning helped out at the workshop in the Leeuwenborch. 'Both students and teachers came along, and we had nice chats with them.' The placards produced bore messages such as 'We are all Excellent', 'More Unilife, less Unilever' and 'In which column should I register my work stress?' **LZ**

# WUR WANTS STALKER ARRESTED IF NECESSARY

**The man who has been stalking WUR for a several years with threatening emails, tweets, Facebook posts and phone calls should be locked up if nothing else stops him, demanded a lawyer representing WUR in court last week.**

WUR seeks a restraining order of unlimited duration, with a financial penalty for non-compliance. But the institution has little confidence that the stalker, a 32-year-old man from Arnhem, will comply. So lawyer Joost Becker of the legal firm Dirkzwager is also demanding imprisonment if the stalker seeks contact again. If he makes more than 10 attempts, he could then go to jail for a while.

According to Becker, this is an unusual demand, but WUR has no alternative. 'This is a case of systematic harassing of staff, students and directors.' Among others, staff at the Student Service Centre, are feeling very threatened, says Simon Vink, spokesperson for the Executive Board. 'We want this to stop.'

The harassment started in 2016, when the

man tried to register as a student. He was rejected because he did not meet the admission requirements. He then began to send emails and messages on social media, which became more and more threatening as time went on. It led to extra security measures in some buildings, especially the Student Service Centre.

The stalker tried to register 18 times, each time for a different degree programme. In the past couple of years, he has sent more than 3750 emails, 2544 of them last year alone. That is an average of seven per day, but there were days when he sent 120 emails. In total, he has approached more than 100 people at WUR, having found their addresses on we@wur, a largely public online Who's Who for WUR.

A restraining order is already in force. One day after the court hearing, the man was handed another restraining order in a legal case against him, which is also about threatening behaviour and stalking. The stalker was banned from the campus two years ago, says spokesperson Vink, but it is difficult to know whether he has respected it, as hardly anybody knows what he looks



PHOTO: SHUTTERSTOCK

like. The verdict on the case will be delivered on 14 March. **RK**

## NUMBER OF TOP MSc PROGRAMMES DOWN

**The number of MSc programmes at Wageningen University described as 'top' has gone down from 21 in 2018 to 13 in 2019, according to the Dutch Master's degree guide *Keuzegids Masters*, published on Tuesday 5 March.**

Dean of Education Arnold Bregt sees two reasons for the drop. 'On the one hand, you can see that other universities have started taking their educational work more seriously. The score in the *Keuzegids* is relative. So that means our score gets lower if our programmes maintain the same standard, while other programmes improve.' Then there is the impact of growth, Bregt thinks. 'It is the law of the large numbers. Wageningen is known for its small classes, but the number of students has grown in recent years, and the number of teaching staff has not kept up.'

Bregt takes the figures seriously. 'We take all relevant figures about education seriously. We analyse them, discuss how we can improve things, and take action. The National Students Survey revealed that Wageningen was not scoring so well on preparation for the job market. So to improve on that, all programmes now have to organize a minimum of five interactions with professionals in the field each year – things like guest lectures or excursions.'

WUR is still the best university, says the guide, with a total score of 68. The science universities of Twente and Eindhoven follow at a distance of one and three points, respectively. These three science universities score higher than the general universities. Delft is the only science university with a relatively low score, 57. **LZ**

**Science Cafe**  
**Wageningen**

www.sciencecafewageningen.nl

---

Doping in Sports

Thursday, March 21  
Café Loburg  
19:45 Live music  
20:15 Science  
**FREE ENTRANCE**

**Dr. Ron Welters (RU)**  
**Prof. Hidde Haisma (RuG)**

Partners:

Sponsored by:

RESOURCE

# WOLF CUBS ON THE VELUWE A POSSIBILITY

**There is a chance that there could soon be a happy young wolf family living on the Veluwe. So says ecologist Hugh Jansman of Wageningen Environmental Research following a genetic analysis of wolf droppings.**

According to Jansman, male and female wolves have been roaming the same area of the North Veluwe. 'It's possible that they have met.' It remains to be seen whether the two wolves will pair up. If they do, cubs might be born at the beginning of May.

The wolves in question are a female with the codename GW998f and a male, GW893m. The female was first noticed on the North Veluwe at the end of July last year. She comes from a

pack in the Babben area of Germany, about 600 kilometres from the Dutch border, and has been in the Netherlands for six months. That makes her the first wolf to settle in the Netherlands for 150 years. The droppings of hers that were found suggest she has been around continuously, but the conclusive evidence was a splash of blood on a footprint in the snow. Jansman says it was probably ovulation blood.

The male, wolf GW893m, made his appearance in the Netherlands on 6 January. He came onto the Dutch wolf researchers' 'radar' through samples from sheep killed in Heino and Damsholte. In the weeks that followed, droppings of his were found in the area where



PHOTO: SHUTTERSTOCK

There is a chance that wolf cubs might be born on the Veluwe in early May.

the female has been observed.

There are two other female wolves in the country, according to Wageningen Environmental

Research. One of these, GW960f, is also living on the Veluwe. **RK**

## 'WHY DO WE WANT FARAWAY HOLIDAYS?'

**Edward Huijbens, an Icelander with roots in Amsterdam, is Wageningen's new professor of Cultural Geography. He is going to focus on sustainable tourism. 'Our competitive consumption has a massive global impact.'**

Edward Huijbens comes from Akureyri, a remote town in the north of Iceland. He studied Geography in Reykjavik and did his Master's and PhD at Durham University in the UK. He speaks a little Dutch: his father comes from Amsterdam. 'He was working on a merchant ship and he met my Icelandic mother in Norway.'

In Akureyri, Huijbens did research on tourism in the Anthropocene. 'There is a debate among natural scientists as to the extent to which the climate change we have caused marks a new geological epoch,' says Huijbens. On Iceland, he watched the development of nature tourism from close quarters. 'There is something ambivalent about ecotourists. They fly to the polar region to see melting ice caps and raise awareness of climate change. And by doing so, they are contributing to it.' Huijbens studied how Iceland can combine

fast-growing tourism with nature conservation and benefits for the local population.

Nowadays he works on the influence of the energy transition on tourism. 'We can't fly on solar power, so we need new tourism concepts. I want to research the concept of the 'staycation', in which we visit and learn to appreciate the cultural and natural attractions of our local area. Why do we want faraway holidays? We live in a society of competitive consumption and that has a massive global impact. At the moment, 85 per cent of long-distance tourism still comes from Europe and North America, but soon the whole of the middle classes in China and India will want to see Paris. The tourist problems in Amsterdam are only going to get worse.'

So in Wageningen, Huijbens is going to do research on sustainable tourism in Amsterdam. 'Our group is involved in the Amsterdam Institute of Advanced Solutions, in which we'll be working on this issue with others. If we manage to solve this problem for Amsterdam, then we'll have solved it for cities like Paris and Barcelona too.' **AS**

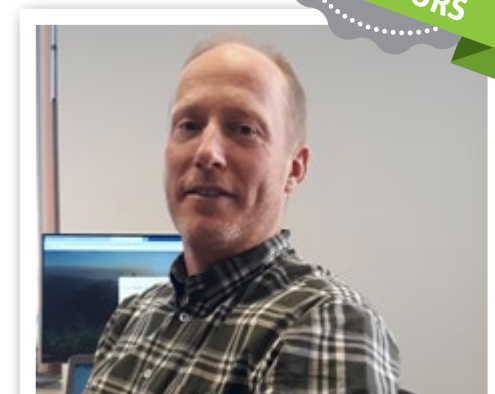


PHOTO: ALBERT SIKKEMA

▲ Edward Huijbens is the new professor of Cultural Geography.

### BART KOELMANS



PHOTO: BERBER HANIA

The Aquatic Ecology and Water Quality chair group has a new professor too. Bart Koelmans is taking over from Marten Scheffer. Read the interview with Koelmans on resource-online.nl.



# PROTECTING WILD BEES TAKES PRECISION

**We're not going to save our wild bees and hoverflies with a flowery meadow here and a herb-rich field border there. These species are threatened because they make particular demands of their habitat. Precise knowledge of those requirements is indispensable to effective conservation.**

These are the findings in a report by researchers including WUR scientists: *Wild bees and hoverflies by landscape type*. The research was prompted by questions from nature managers, municipalities and the agriculture sector about how to protect important pollinators such as wild bees and hoverflies.

Using existing distribution data, the researchers drew up a list of the bees and hoverflies inhabiting different landscapes. Each landscape has its own bee and hoverfly population. 'Based on this, managers can take measures tailored to the species present or potentially present. Threatened bees and hoverflies have specific requirements in terms of their host and food plants, microclimate and landscape,' says Jeroen Scheper, a researcher at the Plant Ecology and Nature Management chair group, and one of the report writers.

The area of the Netherlands richest in threatened species is hilly Limburg, followed by the delta area.

Both regions are home to species that only occur in that landscape type. The coastal dunes score just as high, but even urban areas house quite a few threatened species. The more vegetation, old walls, bee hotels and neglected corners full of weeds, the richer.

From a previous WUR inventory, we know that 80 per cent of crop pollination is done by just 2 per cent of the bee species: a precarious situation. Scheper: 'The advantage of it is that the number of individual crop pollinators can quite easily be boosted with relatively simple interventions such as sowing field margins. The handful of most important bees – especially bumble bees – are generalists and not at all fussy.'

With a bit more vegetation in agricultural areas, by planting hedges, for instance, or making ditch banks more natural, land managers could bring back a small number of threatened bees and hoverflies. But that only applies to species whose numbers are not too critically low yet, and whose survival is not seriously threatened.

The most threatened species need more precise measures, says Scheper. It remains for further research to clarify which specific demands the various threatened species make of their habitat, and what measures are therefore needed. **BMW**



PHOTO: SHUTTERSTOCK

## VISION



PHOTO: MANON BRUININGA/HOLLANDE HOOGTE

### 'A warm spring is risky for nature'

**The exceptional warmth in February could have serious consequences for the water supply during the coming growing season. And nature has not yet recovered from the drought of 2018. 'We are entering uncharted territory now,' says researcher Ryan Teuling of the Hydrology and Quantitative Water Management chair group.**

#### *Has nature recovered yet from the dry summer of 2018?*

'No. At the end of the summer the average precipitation deficit (rainfall minus evaporation, ed.) was about 300 mm. The winter was not extremely dry, but it did not rain enough to make up the shortfall. So we are lagging behind a bit this spring.'

#### *What is the effect of such an extremely warm period in February?*

'The plants are not green yet, so evaporation is still low. But of course, moisture does evaporate from the soil due to those high temperatures. If that is 1 mm per day, then you lose 10 mm rather than gaining 10 mm in additional rainfall. A week or so of lovely weather like that doesn't help. It adds up, especially on the higher sandy soils.'

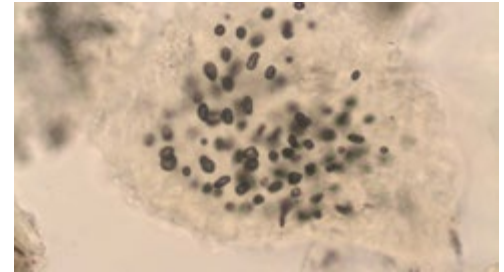
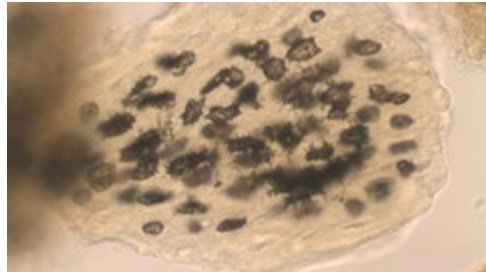
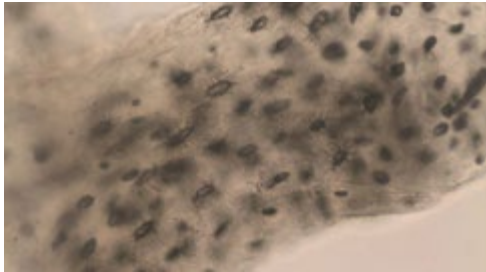
#### *Is the weather in the next month crucial?*

'The soils are still moist enough at the moment. But if it stays relatively warm, the leaves will come out early. And then, in four weeks' time, evaporation will speed up. That is much earlier than normal. The available water will get used up much faster and all the water will be gone by the summer. That is not a problem in itself, but it does mean we mustn't have a dry summer.'

#### *And we don't know about that yet?*

'We are living in a time of extremes. Temperatures have never been so high in February. We are now entering uncharted territory, in a climate zone that is new for us and for nature. Professionally, I still hope for a dry summer, but that wouldn't be good news for the Netherlands.' **BRK**

## 'REGULATIONS ON BONE MEAL COULD BE RELAXED A BIT'



PHOTOS: RIKILT

▲ Bone fragments of cows, pigs and chickens.

**Proponents of circular agriculture want to use animal waste in livestock feed so as to use as much of the animal protein as possible. This is allowed, but only in what are called 'food webs', in which, for example, abattoir waste from pigs is processed into chicken feed, says Leo van Raamsdonk, of Rikilt.**

In order to prevent the spread of BSE ('mad cow disease'), there has been a ban on using abattoir waste from cows in livestock feed in Europe since 2001. The EU placed restrictions on the processing of other animal waste flows too, including meat waste, skin and bones – all of which contain valuable proteins. Proponents of circular agriculture want this 'bone meal' to be brought back into use as livestock feed, and therefore

want the EU to relax the rules. It is important to keep a close eye on food safety, though, says Van Raamsdonk of Rikilt. 'Using waste from ruminants in livestock feed is, and will remain, strictly forbidden. There is no support for relaxing those rules, because no one wants to have 180,000 mad cows again, as we did in 2000. The point is that the prions that cause mad cow disease accumulate in the animals' brains over many years. Prion diseases have now been found in deer, reindeer and dromedaries. So you don't want to bring waste products from ruminants back into the food chain.'

There is more scope for using waste from other animals, though, adds Van Raamsdonk. 'The EU currently bans the use of pig and poultry waste in feeds. Since 2002, the EU has labelled this cannibalism: animals

should not eat members of their own species.' Bone meal from pigs and poultry may only be used in feed for domestic pets and fish. Van Raamsdonk thinks this rule could be relaxed. 'The EU is working on that. In the new proposal, pig waste products may be processed into poultry feed. Then the EU still observes the cannibalism ban, but more animal waste products can be processed into livestock feed.'

These EU rules have consequences for the design of the new circular agriculture, thinks Van Raamsdonk. 'Waste from production chain A – pigs – would be supplied to production chain B – poultry – while waste products from B are supplied to A or C – fish farming. Then you create food webs, in which waste products are moved around via a whole range of different processing methods.' **AS**

## HARRY POTTER CUP CHANGES COLOUR

**Wageningen researchers have created material with magical properties. It can be transparent or not, depending on the light.**

Researcher Vittorio Saggiomo of the BioNano Technology chair group demonstrates the effect with the light on his mobile phone. He has an opaque, reddish-brown cup in his hand. But when he holds his light behind the cup, it suddenly turns purple and transparent. It looks like magic. The cup was 3D-printed in his lab, and changes colour with the position of the light source.

What Saggiomo is demonstrating is the dichroic (two-colour) effect of the material the cup is made of, a mixture of the polymer PVA (polyvinyl alcohol) and gold nanoparticles. The tiny chunks of gold

reflect the light or let it through, depending on their size.

The discovery of this light effect of gold particles was made by Master's student Lars Kool. During a minor on BioNano Technology taught by Saggiomo, he did an assignment that entailed making gold nanoparticles by reducing gold ions with citric acid. But he adapted the proportions of the ingredients in the instructions, which created the dichroic effect. Saggiomo then hit upon the idea of using the particles to make dichroic 3D-printed material.

The bicoloured effect occurs with a particular proportion of gold to citric acid solution. The gold chunks that are then formed are 50 to 60 nanometres in size and oval in shape. It is a simple and, what is more, cheap procedure. Kool: 'Gold



▲ Gold nanoparticles ensure that this cup changes colour depending on the position of the light source.

is expensive, but the concentrations we use are very low. There is much less gold in the cup than in a mobile phone.'

Saggiomo envisages plenty of applications for the use of gold nanoparticles in 3D printing. 'For example, you can make lenses with it

that allow light through selectively. You can use the effect in solar panels to allow light through. Or you can use those nanoparticles in sensors.' Lars Kool hopes to graduate in the autumn and would like to continue working on his discovery as a PhD student. **RK**



# 'Go short' preview

Impulse (building 115) Wageningen Campus  
Mar 19 | 20:00h | Free admission

events  
debates  
meetings

**Impulse**

**GO SHORT** International Short Film Festival Nijmegen

## PROPOSITION

### 'I too only started blossoming when I saw the light'

**On that sunny spring day in February, we were all aware of the revitalizing power of light. Faline Plantenga experienced this for herself when she was writing her thesis – and discovered that people are sometimes just like potatoes.**

'The more the light, the earlier the blossom: that was a conclusion from my PhD research on tuber formation and flowering in potatoes. I noticed something similar in myself, sitting at my desk. I worked with a lot of students in Radix. To begin with, I was sitting on the courtyard side, the dark side. We had all been given an orchid, which stood on our desks. But our orchids wouldn't flower, while those of others elsewhere in the building did.

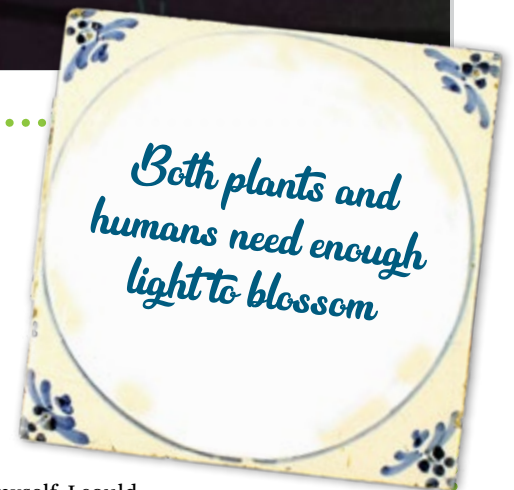


Faline Plantenga graduated on 12 February with a PhD on the role of light in tuber formation and flowering in potatoes.

When I started writing up my PhD, I moved to the sunny side of the building. As soon as my orchid arrived there with me, it started to

flower beautifully. And that was not all: the sunlight affected how I worked myself. I could – and can – concentrate better in a well-lit environment. I'm obviously not cut out for the night shift! So light makes people blossom. Of course, that has already been proven on several fronts, and has been applied, as in light therapy for winter depression. You can see it again now with those extremely early spring days in February: everyone is cheerful and full of new energy.

As a person, you also start flourishing if you see the light in a figurative sense: if you're doing what you enjoy. I only started blossoming after my secondary school years, which was a rather socially awkward period in which I started to live independently and study subjects that interested me. Now I have a new job in a WUR research station in Bleiswijk, where I'm still doing research on plants and light. Research that suits me, and that may well lead to new things. So I'll go on flowering for a long time, I hope.' **JB**



MSc student Jelle Jolink opts for a farming career

# Happy among the cows



Dutch farmers are having a rough time. Their incomes are falling and their public image is indifferent, to put it mildly. But MSc student Jelle Jolink isn't letting that stop him opting for a career in dairy farming. 'I was doubtful for a long time, but farmers have an amazing passion for their profession; it's so great, it's hard to explain.'

*text Luuk Zegers photos Marije Kuiper*

**T**he health of the soil is in decline. Everyone's worried, but not enough is being done about it. As a food producer, I see it as my responsibility to develop a sustainable system that minimizes emissions and protects biodiversity, while still remaining profitable.' The speaker is Jelle Jolink, a student of Biosystems Engineering in Wageningen on weekdays, who spends his weekends working on De Peppel, a dairy farm in Drempt, Gelderland, with 110 cows.

Jolink manages the manure and the cows' diet, and helps his father with the day-to-day running of the farm. When his father retires in 10 years' time, Jelle and his brother Hidde want to take over the family farm. On a grey Saturday in January, he shows me round the farm, in between milking and feeding the cows.

#### CALVES

De Peppel is like an open-air museum, with Jolink as tour guide in blue overalls and rubber boots. The farm itself is 150 years old, he tells me. In the barn adjoining the farmhouse, cows have made way for a workshop. 'Indoors you can still see a hole where a bomb fell during World War Two; it's been covered with corrugated iron.' A few metres away there is a 100-year-old barn: 'It was once for pigs, but my father got rid of the pigs.' Now the barn houses calves.

The large barn, with space for 110 cows and the milking plant, was built in instalments. 'The first section dates back to the 1970s, and after that new sections were added at different times so the herd could grow.' This is typical of the De Peppel ideology, says Jolink. 'We don't grow fast but we do grow steadily.' Plenty of light comes through the big windows of the barn. Cows chew contentedly on the feed Jolink brings in with the tractor.

#### SHORT CYCLE

From the farmland you can look out over the land, which is part of De Peppel as far as the eye can see. 'Enough grass and maize to provide our whole herd with roughage,' says Jolink. 'We add a small proportion of concentrated feed to that. And now we are also growing fava beans, a variety of soya bean that grows in the Dutch climate, to replace the soya we buy in Brazil.' This is in line with Jolink's belief that the shorter the cycle, the better.

'On the other hand, you can never close the cycle completely. If we were to stop importing artificial fertilizer and concentrates entirely, all the minerals that are in the milk would have to come back to the farm from the sewers. Even if that were possible, you have to remember that a lot of the milk we produce in the Netherlands is for the international market. It goes to China and the rest of the world. So you still have to transport minerals. My aim is to make the cycle as local as possible, but it is never 100 per cent feasible.'

#### SUSTAINABLE FARMING

As a prospective farmer and a WUR student, Jolink is actively looking for ways of making operations at De Peppel more sustainable. His search for ways of improving the health of the soil brought him to Thierry Stokkermans, whose company Zip Drill is located in StartHub. Jolink: 'A lot of research has been done on the advantages of no tillage. The research shows that you can produce just as much without tilling the soil, losing less nitrogen and conserving soil life. And yet most farmers still plough. We've been working with Thierry

**'You can only go sustainable if you really set to work at farm level'**

on a four-year trial, growing maize with his no-tillage system. We are monitoring the health of the soil, the yields, the soil life and the organic matter.'

Jolink dreams of an agricultural system that is so sustainable that it could keep going for 1000 years. 'A system without artificial fertilizer and RoundUp. My father sometimes says, "Tomorrow starts today". If we want sustainable agriculture in future, we need to start changing things today. And you can only do that by really setting to work at the farm level, not by thinking up lovely systems that farmers don't adopt.'

#### SAM THE DOG

Wherever he goes on the farm, Jolink is followed by a hyperactive puppy called Sam. From the ease with which the WUR student drives the tractor, the pride with



▲ It was not a foregone conclusion that Jelle Jolink would become a farmer. 'It's hard work, and you needn't expect a fat paycheck.'

which he talks about 'his' farm, and the familiar whistle with which he calls Sam to heel, you can see that he is in his element at De Peppel. Nobody watching him now would be surprised to hear he plans to take over the family farm. And yet that couldn't always be taken for granted. In fact, for a long time it didn't seem like a realistic option. Jolink suffered from hay fever as a child – not great if you live on a farm. But even when the allergy calmed down, it was not a foregone conclusion that Jolink would become a farmer. 'It's hard work, it

### **'Farmers can't do anything right, but at the end of the day we've all got to eat'**

entails a lot of administration and rules and regulations, and you certainly needn't expect a fat paycheck. And farmers are not portrayed positively in the news. Either we are producing too much manure, or there are too many cows, or the cows are too crowded. It is not easy if you only see negative articles about your sector. And some of them are totally wrong. Then farmers can feel as though they are being driven out of business in the Netherlands, because you can't do anything right. But at the end of the day, we've all got to eat.'

#### **TO WAGENINGEN**

When he finished secondary school, Jolink intended to do a technical degree. 'I went to have a look at open days, and it was all very nice, but something was missing for me until I looked at the degree in livestock farm-

ing at HAS University of Applied Sciences in Den Bosch. Then the penny dropped. I was doubtful for a long time, but farmers have an amazing passion for their profession; it's so great, it's hard to explain.'

Jolink finished at HAS when he was 21. 'My father was 51 at the time. His whole farm was geared to being able to do the daily work, the feeding and milking, on your own. Since my dad wants to go on working until he's 65, there wasn't enough work for me. So I could either get a job somewhere else straightaway, or go on studying for another couple of years first.'

That wasn't a difficult choice: Jolink looked for a Master's course which would bring together his love of the farming world and technical knowledge. 'For that you more or less have to go to Wageningen.' He chose Biosystems Engineering. 'There I learn that if there is a problem, the first thing you do is to figure out exactly what's going on. Then you have a look to see if you can solve it with an organic approach.' He gives the example of ammonia emissions. 'If manure and urine are not mixed, no ammonia is formed. Cows in the meadow hardly ever poo and pee in the same place, but people put cows in barns, and then the manure and the urine do get mixed together. If you want to solve that problem with organic methods, you are not going to invest in air filters and complex floor systems to limit the formation of ammonia. Instead, you'll look at how to prevent the manure and urine from mixing. Could the cows spend more time outside, for example? Could they be milked out of doors?'

#### **COWS' TOILET**

The cows at De Peppel already spend as much time as possible out of doors, and Jolink is now using his internship to look for a solution to the ammonia problem in the barn: a cows' toilet. 'At the rear end

of the cow, just above the udder, there is a kind of nerve. If you touch it, the cow pees. We are developing a system in which a cow comes to eat concentrated feed pellets in a stall. Behind the cow is a container for urine, and a mechanism that presses on that nerve so the cow pees. The urine doesn't end up on the floor but stays separate from the manure. Initial model calculations show an ammonia reduction of at least 50 per cent.'

Jolink's father, Henk (54), is enthusiastic. 'In a few years we are due to replace our old barn. If you build a new barn now, you have to build low-emission floors that limit ammonia emissions. That is a very complicated setup with valves and so on, which don't work at all well in practice. A cows' toilet is a fundamental principle that works, and you can expand it if you want to expand the farm.'

#### MEDITATIVE MILKING


Late afternoon is milking time. Jolink junior herds the cows to the queue, and his father lets the first 28 into the milking shed. One after another, they have their udders cleaned, after which suction cups are clamped onto the nipples and milking can begin.

It is hot and steamy in the milking shed, and the continuous slurping and pumping sounds have a slightly hypnotic effect. Milk pours into the tanks. A nice photo opportunity, because in the end this is what it's all about, this is what the farmer does it all for. But the photographer has to wait a moment before she can take a picture, because the first group of cows has almost been milked and then the next one is ready. No time to pose now, because it's 'ladies first'.

While milking is going on, Jolink ponders his day. 'It's nice to be among the cows and see them individually for a moment, and see how they are doing. It never ceases to amaze me that as a farmer, you



**'It can be quite nice to be surrounded by 28 ladies who don't talk back'**


and your cows can turn grass – something humans can't do anything with – into milk, which contains nearly all the essential nutrients. Milking itself gives me a peaceful feeling. It can be quite nice to be surrounded by 28 ladies who don't talk back.' 







## SUMMER IN FEBRUARY

One heat record after another bit the dust last week. The day this photo was taken, Wednesday 27 February 2019, was officially the hottest 27 February since records began in 1901. The area between the Forum and Orion was packed with people having lunch in the sun. Or skimming through their handbook on *General Chemistry for the Life Sciences*.  LdK, photo Sven Menschel



# WUR and the Province

Gelderland Provincial Council deals with issues that are close to the hearts of WUR staff and students, some of which have a direct impact on the institution. Four candidates with a WUR background talk about why it is worth making the effort to vote in the Provincial Council elections on 20 March.

text Anton van Elburg

**C**limate, agriculture, nature management, energy, the economy and spatial planning are all matters on which the Provincial Council takes decisions. They are also topics that WUR students and staff address in their studies and research. So it is logical that the candidates with WUR degrees often mention their passion for these issues as their driving force in standing for election.

'Very interesting to look at these topics from another angle,' says Christian Union candidate Judith Westerink, a researcher at Wageningen Environmental Research. Westerink wants to help reduce the contrast between farmland and nature areas: 'We are working towards a good future for farmers, in which they play a role in nature management. There is too little biodiversity on farmland. That has got to change.'

## CLIMATE

The theme of climate change is not just a headache for central government, but a hot topic in the Provincial Council as well. D66 Gelderland wants to allocate 2.6 billion euros to sustainability measures. Antoon Kanis, an MSc student of Economics and Policy and third on the party's list of candidates: 'Having sold off Nuon, the Province has a lot of money in the bank. We want to invest that in large-scale greening of residential neighbourhoods.'

For Jan Daenen, an MSc student of Management, Economics and Consumer Studies, and sixth candidate on the left-wing PvdA's list, this proposal goes too far. 'We should keep a buffer for coping with a possible next economic crisis. And those greening measures must not be limited to a lobby for geothermal heat pumps for the elite, because that will only increase resistance among the general public.'

## ACTIVITY

Considerations about exactly how to spend the sustainability billions will dominate the discus-


sions. The green GroenLinks party would rather place solar panels on roofs than in fields, says Esther de Wit, a governance researcher at Environmental Research, and number 11 on the GroenLinks list. 'We also think the Province should have a greener purchasing policy, and should aim to increase biodiversity through its management of verges and dykes. I can imagine that Wageningen companies will implement that.'

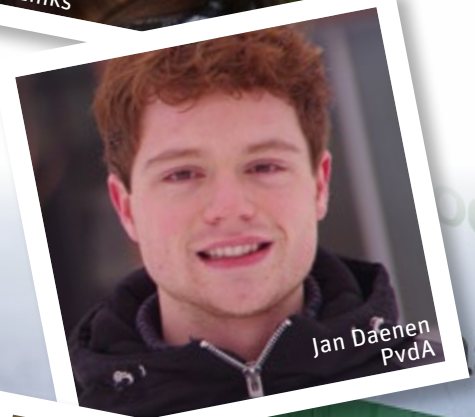
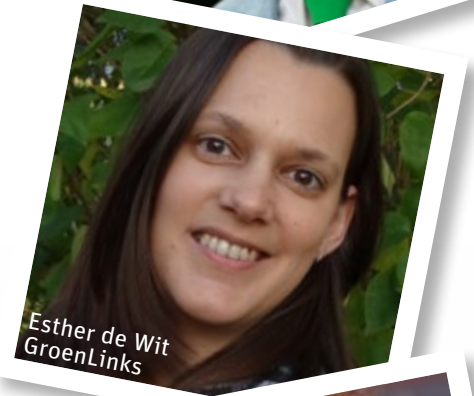
De Wit touches on another provincial theme here: stimulating the regional economy. Because expenditure is balanced out by assignments for researchers and companies. GroenLinks would like to see the Province helping startups to grow faster.

## LIGHT RAIL

One typically regional theme is accessibility. There are some obvious bottlenecks, such as the Wageningen campus. PvdA's Daenen: 'It is almost inept, how inaccessible the campus is.' Some parties see new roads as the solution, while others want better public transport. Daenen and D66's Kanis think a feasibility study should be done on a light rail link between Ede-Wageningen station and the campus. GroenLinks candidate De Wit would also like to make public transport cheaper, and even free at certain times.

## LOW TURNOUT

The Provincial elections are not really popular, as is obvious from the steadily falling turnouts. This is partly due to unfamiliarity with the Province, thinks Daenen. 'I used to have no idea what the Province did, either. When I went into it, I saw that the Province works in many areas that interest me, such as the environment and the regional economy. Now I would very much like to roll up my sleeves to change things.' 



## WHAT DOES THE PROVINCIAL COUNCIL DO FOR WUR?

### 1. Good business climate

More innovation, more jobs. Every province tries to attract as much talent, and as many companies and institutions to the region as possible. The decision to invest 65 million euros in the digital innovation centre OnePlanet, which WUR participates in, is the most impressive example of Gelderland's ambition (see too the news item on page 6). Another example is the business hub PlusUltra, in which the Province invested 3.5 million. The Shared Research Facilities, which WUR, companies and other institutions can use, were able to start partly thanks to an injection of 6 million in Provincial funding. For years, too, the Province has supported a sound 'agri-food ecosystem' in the region, including Food Valley and the World Food Centre.

### 2. Better accessibility

The poor access to Wageningen Campus is one of the threats to the success of the region, says the WUR Executive Board. Originally, Wageningen municipality was going to solve the problems with a ring road around the campus. But when the Municipal Council opted for a route across the campus, the Province ruled this impracticable and undesirable, and took over the reins. A study of possible solutions is still going on. A possible light rail connection with Ede-Wageningen and a new direct bus line to Arnhem are other typical Province projects.

### 3. Research assignments

The Province is also a research client to the tune of one million euros a year in direct assignments from Gelderland for various research units. Examples are the assignments coming out of the Nature Pact, for developing and managing nature. There are assignments from other provinces too. Zeeland recently signed a research agreement with the WUR regional centre in Yerseke, for instance.

## WHAT DO THE PARTIES SAY ABOUT WUR?

There are 15 parties contesting the elections for the Provincial Council on 20 March. Here is an overview of the positions in their election programmes that are directly or indirectly relevant to WUR

**VVD** (right-wing, 9 seats): Access to Wageningen has priority; knowledge-sharing between higher education and small and medium enterprises needs improvement; the campus should be further developed.

**CDA** (Christian democrat, 9 seats): WUR should come up with more innovation concepts; scientific knowledge should be shared more widely with the public.

**D66** (liberal democrat, 7 seats): More cross-pollination between Health (Radboud Medical Centre in Nijmegen) and Food (WUR).

**SP** (Socialist Party, 6 seats): Sharing of knowledge between higher education and SMEs needs improvement.

**PvdA** (labour, 6 seats) Public transport from Ede to campus must be improved; the traffic jams at the main entrance to the campus need tackling.

**PVV** (the populist Freedom Party, 5 seats): WUR is not mentioned.

**CU** (Christian Union, 4 seats) The municipality should remain in control of access to the campus.

**SGP** (Christian right, 3 seats): The campus should be developed further to attract startups and research units.

**GL** (Green Left, 3 seats): A campus route is not a good idea; public transport from Ede to Wageningen needs improvement; in the long term, build a light rail.

**PvdD** (animal rights, 2 seats): WUR is not mentioned.

**50Plus** (pensioners' lobby, 1 seat): WUR is not mentioned.

**FvD** (right-wing, populist, 0 seats): No programme available.

**Code Orange** (pro-participation, populist, 0 seats): Improve the dissemination of knowledge from WUR to the business world.

**Denk** (multi-culti, 0 seats): More regional profiling on the theme of 'food'.

**Jesus lives** (evangelical Christian, 0 seats): WUR is not mentioned.





# Planting trees for chickens

Trees capture CO<sub>2</sub>, so planting more trees helps slow global warming. Poultry farmers have an extra reason to plant trees on their land: their chickens are happier in the shade.

text Roelof Kleis illustration Annet Scholte photo Guy Ackermans

**O**n Johan, Jantine and Ariën Verbeek's organic poultry farm outside Renswoude, 201 walnut trees have been planted. They are now just lean saplings barely two metres in height, planted about ten metres apart. You could hardly call it a wood yet, but in another few years it will be a pleasant, shady spot.

The walnut orchard will be the outdoor run for some of Verbeek's 16,000 organic chickens. The new group has just arrived and is still acclimatizing in the barn. Once the chickens have adjusted, they will start using this wooded plot as their outdoor run. The project is one of several WUR-led pilots that aim to demonstrate how additional forestry interventions can contribute to the battle against climate change.

**'Birds of prey are a problem here: hawks and buzzards'**

## AGRO-FORESTRY

The trial on Verbeek's land is an example of agroforestry, which project leader Martijn Boosten defines as: 'a combination of agriculture and forestry that creates a win-win situation.' Boosten works for the Wageningen-based NGO Probos. 'In this case, that is combining poultry farming with planting new trees.'

Chickens were originally Asian forest animals and still have a preference for the forest lodged deep in their brains, says farmer Johan Verbeek. 'I've got a big shed over there with a wood alongside it. If there's any threat of danger, the chickens fly into the woods.' And danger is always hovering. 'Birds of prey are a problem here: hawks and buzzards.'

The legal requirement for organic or free-range chickens is that they each have four square metres of outdoor space, says Boosten. 'But in practice you can see that they

don't use all that space, by any means. Chickens tend to keep close to the barn, which offers them shelter and safety. By planting trees in the outdoor area, you attract the chickens into it. That is good for the chickens and you are capturing CO<sub>2</sub>.' Boosten points out a few more advantages of the concept. Less disease, for instance, because the chickens are less crowded together if they make better use of their outdoor space. Trees make the farm more attractive too, and they are productive in the long run. These particular trees will produce walnuts.

## KEEP IT SIMPLE

Planting trees in the chicken run is not a new idea. Both Probos and the Louis Bolk Institute have prior experience of planting fruit trees, willows and elephant grass. One of those pilots was done on the Verbeek farm too. Right in front of the farmhouse there are dozens of apple, pear, cherry and plum trees on a two-hectare chicken run. That was a steep learning curve, recalls Verbeek. And the main lesson was: stick to what you know about. 'Maintaining fruit trees calls for specific knowledge. And it was not so handy to opt for four different kinds of fruit trees. We are not fruit farmers.'

'Growing fruit trees requires expertise and money,' confirms Boosten of Probos. 'Planting one hectare easily means an investment of 20,000 euros. In a good year, you

## EXPERIMENTING FOR THE CLIMATE

The Netherlands aims to cut its greenhouse gas emissions by 49 per cent by 2030, compared with 1990. How we are going to do that is to be laid down in a comprehensive Climate Agreement. But while the politicians in The Hague haggle over the contents of that agreement, around the country numerous experiments in emission reduction are already under way. WUR is coordinating all the pilot projects for the Agriculture and Land Use sector. *Resource* will be taking a look at these experiments in the next four numbers. This week, episode 2: Forestry.



▲ Farmer Johan Verbeek and project coordinator Gert-Jan Nabuurs from WUR by the young walnut trees which will provide shade for Verbeek's organic free-range chickens.

recoup that, but then you become a fruit farmer of sorts, really.'

So the message is: keep it simple. That is why three out of the four farmers carrying out a pilot with supervision from Probos opted for walnut trees, which are relatively cheap and low-maintenance. The fourth chicken farmer wants to plant willows to produce biomass.

#### BENEFITS

Planting the trees cost Verbeek 12,500 euros, not counting a subsidy that covered one quarter of the costs. So that investment has to be recouped. 'That is the idea behind these pilots,' says Boosten. 'Show the costs and the benefits. Projects like these have to be able to cover their costs in the end. They are not supposed to keep going on subsidies endlessly.'

But for the time being, the benefits side of things is a long-term affair. It will take six years before the walnut trees bear any fruit, estimates Boosten. 'Ten years even, for a reasonable quantity to sell.'

Seeing will be believing for Verbeek, when it comes to profits from sales. In fact, those walnuts could cause problems. Germany is an important export country for Verbeek's organic eggs. Verbeek: 'But the German certifying agency KAT has said it won't accept eggs from a farm where the outdoor run is used for two economic purposes. Like eggs and walnuts. Strange, yes.'

It's OK for me to give the walnuts away or feed them to my pigs, but not to sell them.'

#### CLIMATE EGGS

It remains to be seen how this will work out. Meanwhile Verbeek sees more future in selling his agroforestry eggs as a niche product. Verbeek is chair of the cooperative *Biomeerwaarde-ei*, a group of organic farmers who want

to be more ambitious about sustainability. Verbeek thinks the added value of his eggs lies in things like the use of solar panels on the farm. The green chicken run adds sustainability value too. 'We can get a better market position for the 'organic added value egg' like this.' Will that lead to a new egg on the supermarket shelf, the climate egg? Verbeek savours the word approvingly. 'That's quite possible.' **B**

## REDUCING EMISSIONS WITH BETTER FORESTRY

Greenhouse gas emissions can be reduced significantly by planting additional trees or managing existing forests better. WUR and 33 partners are conducting a series of pilots to map out the possibilities. The forestry projects cost a total of 2 million euros, a small proportion of the 19 million WUR received for all the pilots in the Agriculture and Land Use sector under the Dutch Climate Agreement. The information from all the pilots will provide a toolbox that land managers can make use of.

The pilots are all about carbon sequestration, says coordinator Gert-Jan Nabuurs (professor of European Forests), and are in line with the idea of Climate-smart Forest Management launched at the climate summit in Paris in 2015. Besides wooded chicken runs, the concept includes such things as creating food forests, planting new forests with tiny houses, and climate-smarter management of existing forest. Nabuurs has the highest expectations of the latter. 'In the Netherlands there is a lot of older forest where little has been invested in rejuvenation. The biodiversity is often negligible too.' With rejuvenation and filling open spaces, you can revitalize such forests, says Nabuurs. Expanding it with new areas can also make a big difference. 'Provinces still have to lay down some of the Nature Network (formerly known as the Ecological Main Structure, ed.). Planting trees can play a role in that if you look for smart combinations with things like water storage, urban expansion or increasing biodiversity.'

# ‘Health differences are unjust’

People with low socio-economic status often have relatively poor health. That is unjust, says Beatrijs Haverkamp. Health is not so much an individual as a societal responsibility, argues the philosopher in her thesis.

## *When is a person unhealthy, actually?*

‘I think it’s good to link the definition of health to the context in which you are aiming at it. In biomedical research, it is relevant to talk of health as the absence of disease. But for the chronically ill, it is more a matter of wellbeing. Together with the Netherlands National Institute for Public Health and the Environment (RIVM), I did a small-scale study on what people mean by health. People from lower socio-economic classes said health meant not being ill and getting through the day alright. People from higher socio-economic classes set the bar higher in their definition of health: for them it’s all about wellbeing and enjoying life, as well as the impact of your own behaviour.’

## *To what extent are people responsible for their own health?*

‘It’s a complex issue, because differences in health status have a lot to do with differences in lifestyle. We know, for instance, that Dutch men with lower levels of education smoke significantly more. This is largely determined by the social norm within the group. Another thing that doesn’t help is the fact that financial stress often leads to an unhealthier lifestyle. Social housing is often in less healthy locations, with more air pollution and less scope for taking a walk in the park. This leads to some groups being worse off in every way. And conversely: if you have had a good education, you often earn more and you can live in a better location and have a healthier lifestyle. So I don’t agree with the assertion that lifestyle is a personal choice,

and that there is no injustice in some people falling ill more easily than others. Health is determined by a whole complex of social factors and we all help to keep them going. By the way our education system works, for instance, and how different professions are remunerated. So health is a shared responsibility in society.’

## *Your thesis is about the question of whether health differences are an injustice. How do you decide about that?*

‘Justice is about how we treat each other and whether we treat each other equally. Intuitively, you would think there must be something wrong if there are such big discrepancies in health status. But it is quite difficult to say what

identify that minimum. I look mainly at the impact of health on someone’s social position. Health problems can lead to a higher risk of being stigmatized or unemployed, or of having a shorter retirement.’

## *What are the policy implications?*

‘People often think the government should reduce health differences, but that is incredibly difficult. I argue that we should acknowledge that these are persistent differences, and go about it differently, namely by looking more at the inequalities that come about as a result of the health differences. Such as a shorter retirement. You could consider measure such as differentiation in pensionable age based on profession, income or level of education.’ **RTL**

*Beatrijs Haverkamp graduated on 22 February with a PhD supervised by professor of Philosophy Marcel Verweij.*

## ‘Social housing is often in less healthy locations’

justice would look like. You can’t distribute health among people, like you can money. Justice could mean that everyone has the right to equal opportunities. In that case, you look at the underlying socioeconomic differences that lead to health differences. Or you could say that everyone has the right to a certain minimum level of health, and that there is such a thing as being “healthy enough”. But it’s not easy to



# INFREQUENT FLYER?

## Easier said than done

WUR staff clock up a lot of air miles, and therefore contribute a lot to greenhouse gas emissions. That has got to change, says the Executive Board in the new Mobility Vision 2030 (see p.4). Staff must take the train more and use teleconferencing. The researchers *Resource* talked to agree wholeheartedly. But it is not easy.

text Tessa Louwerens illustration Henk Ruitenbeek

### Rik Leemans



**Professor of Environmental Systems Analysis, one of the researchers who asked the Board recently in a 'climate letter' to do something about the many flights**

'One third of WUR's carbon footprint is caused by flying. That really could be reduced. If you have to go to London, for instance, you'll get from door to door just as fast by train. What is more, it's easy to talk to people in the train and there is more space to work. But it is more expensive and since it comes out of the project budget, a project leader is likely to say: just take the plane. In the first years that I worked in Wageningen, I had platinum frequent flyer status with KLM; now I've just got silver, fortunately. I have become much more selective and I don't go to as many international conferences. It's different for young scientists; they still need to build up a network, so direct social contact at conferences is important. But for the old guard, who all know each other quite well, you could perhaps keep in touch in other ways, like video conferencing. **I think WUR should take the lead in this and set clear rules, about taking the train to cities within Europe, for instance.** The guidelines already say these trips should be done by train whenever possible, but people often don't stick to that.'

### Arjen Wals



**Professor of Transformative Learning for Socio-ecological Sustainability**

'I fly too much and I suffer from flying shame. It doesn't make my story any more credible; quite the opposite in fact. When I get asked to an event that means flying, I ask myself:

is the ecological impact of what I will do or set in motion bigger than the ecological footprint I will create to get there? That's not easy to answer. **What is the positive impact, for instance, of a keynote speech to 600 people in Taiwan, about sustainability in education?** I think that in any case, WUR should always compensate for CO<sub>2</sub>. You could put that money into a sustainability fund for the building where the flying staff member works. Students and staff, including cleaners, caretakers and support staff, can manage that fund. It could be used for things like putting solar panels on the roof or making a carpooling app. Make a project out of it that everyone's involved in.'

### Karin Schroen



**Personal professor of Food Process Engineering**

'We scientists travel quite a bit. And **it is required of us to some extent, because WUR wants us to be visible and have an impact.** And I agree with that, but it does worry

me too, because I know what kind of impact this has on the climate. You can do some things digitally. We are seeing that workshops are more often being conducted using Skype. If you have met each other before, and you've worked together regularly, you can do a lot digitally. But it is good for your network to have actually met people once, at least. I try to take the train for trips within Europe. I can work well, especially in the high-speed trains like the one to Paris. But there are also destinations for which the train journey is too time-consuming. Maybe WUR could promote train travel more. There are universities where they only cover the costs of a business trip if you take public transport.'





## Christine Plaisier




International Policy researcher at Wageningen Economic Research

'All the work of our team, Impact Evaluations, takes place overseas, in Asia, Africa and Latin America. I can't do my work properly without flying. I am just rounding off a project in which we have been supervising local research from a distance. And one of our main conclusions about the process was that it didn't work well. **Media like Skype are certainly useful, but it is important to build up a relationship and mutual trust first.** To get some kind of understanding of the people you are working with and the way they work, you need to really be there, especially if you're working with a different culture. Of course, for every trip we ask ourselves what the aim is. And does it weigh up against the environmental costs? Do three of us really have to go or would one person be enough? We certainly discuss things like that.'

## Hannah van Zanten



Research in the Animal Production Systems chair group

'I could travel somewhere every month but I try and keep it to a minimum. Not just for environmental reasons, but also because I have a family. If a conference is held every year, for example, I skip the one in Thailand and go next year when it's in Europe. It's difficult for major discussions but we often discuss smaller issues by Skype, and then get together once a year to discuss the things it's harder to deal with on Skype. We do that not just for environmental reasons but also because it's a more efficient use of time. Personally I don't feel that WUR actively encourages less flying; it's coming more from people themselves. **I try and take the train as often as possible, but sometimes the connections are bad and I would have to change trains in the middle of the night.** Then I do fly, but it does bother me.' 

**GIANT BEE (1)**

Wallace's giant bee is back! The largest species of bee in the world (wingspan 6 cm) was last seen in 1981. Researchers from the University of Sydney recently spotted the bee, named after Alfred Russel Wallace (of evolutionary theory fame) in the North Moluccas. Wallace discovered the bee during his travels through Indonesia.

**GIANT BEE (2)**

The giant bee's scientific name is *Megachile pluto*. A funny name, given that Pluto is a dwarf planet. Wallace discovered the creature in 1958. The rediscovery is not entirely random. A team from Global Wildlife Conservation has long been looking for the insect. A documentary about that quest, *In search of the Giant Bee*, is in production.

**ANTIFREEZE**

The *Belgica antarctica* is the largest land animal in Antarctica. The small mosquito-like insect is very resilient. But how does it manage that? How do its eggs survive, for instance? Biologists from the University of Cincinnati have the answer: they get covered in a kind of gel with antifreeze. This stuff protects the eggs against extreme cold, hot sun and dehydration. Smart, but you do wonder: what is Belgian about it?

**MUSIC**

Listening to music saps creativity, shows a British-Swedish study. People listening to music do significantly less well at linguistic tasks such as: which word fits the gaps: choir ..., church ..., pop .... The finding contradicts popular wisdom, which says music stimulates creativity. Oh yes, the missing word is music, by the way.



# International Club is open again

Music from all the corners of the globe international theme evenings, dancing into the early hours... After being closed for more than one and a half years, the International Club is opening its doors again. The club got a new alcohol licence a couple of weeks ago.

The reopened club on the corner of the Marijkeweg and the Lawickse Allee is going to throw ordinary parties on Friday nights, and thematic parties such as a Brazilian carnival on Saturdays, says manager Kitty Cruden. 'And since Thursday night is the big going-out night for students, we want to open then too. That will be more of a lounge evening.' In 2017, Wageningen Municipality realized that, after a renovation, the International Club Association (ICA)'s licence was no longer valid. Cruden: 'In



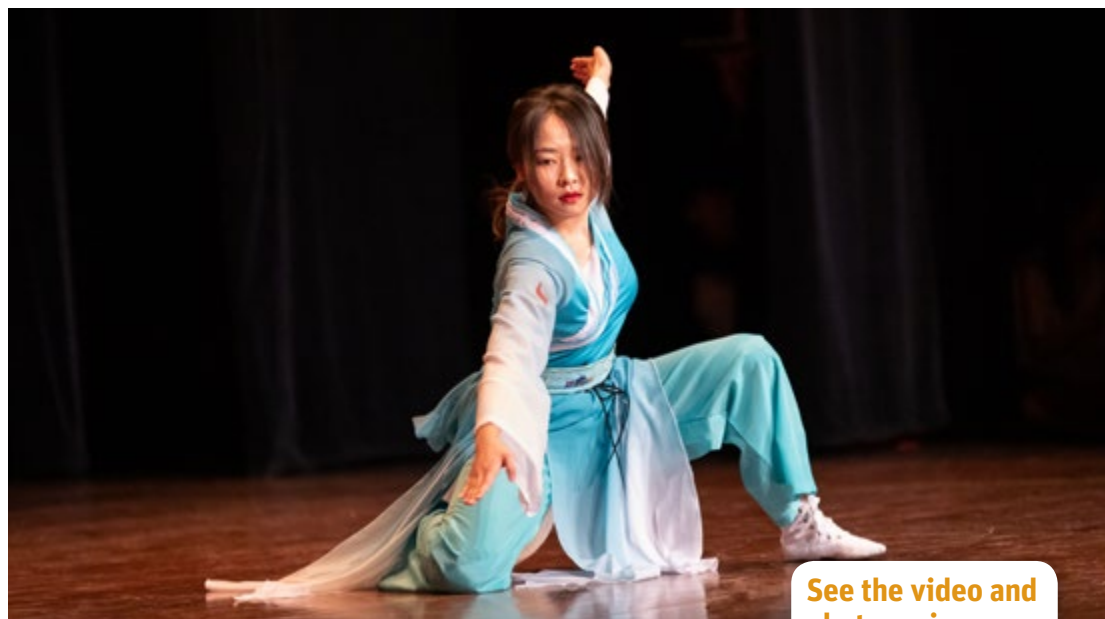
▲ Partying students at the International Club.

2006, we reduced the bar space to expand the dance floor. So the municipality thought we should apply for a new licence. We disputed that, but when the municipality says "jump", you'd better jump. Our licence was withdrawn and it takes a while before you are allowed to apply for a new one.'

The ICA was founded by WUR and Wageningen Municipality in

1958, for students and staff of the university. For a long time, the club was housed in a shack in Wageningen town centre. It moved to its present location in 1983.

Dutch students are welcome at the ICA too, says Cruden. 'Everyone is international, so we are open to everyone.' Students just have to show a student pass, but staff must join the ICA first.' **LZ**



See the video and photo series on [resource-online.nl](http://resource-online.nl)

## Chinees Lantern Festival

The Chinese New Year celebrations ended on Sunday 24 February with the lantern festival. This year the Chinese Association of Students and Scholars in Wageningen (CASSW) pulled out all the stops with an event in the Junushoff theatre for all Chinese students and scientists in the

Netherlands – and anyone else who was interested. The programme featured traditional Chinese acts and performances by local groups such as the student orchestra De Ontzetting. There was a singing competition as well. The festival drew more than 500 guests. **LZ**

PHOTO: INTERNATIONAL CLUB ASSOCIATION

PHOTO: SVEN MENSCHER

# Extinction Rebellion demands more attention to global warming 'Climate change in all degree programmes'

**Don't be surprised if somewhere on campus in the near future, you come across a group of students lying on the ground in a circle. This is the new activist group Extinction Rebellion's way of drawing attention to climate change and the mass extinctions it is causing.**

'Climate change is the biggest problem we face, and everything and everyone will be affected by it,' says Malik Dasoo (24), a Pre-Master's student of International Land and Water Management, and a founder member of the Wageningen branch of Extinction Rebellion. This is a global organization of non-violent activists who want to get climate change higher up the agenda. 'Wageningen University calls itself a University of Life Sciences, but you can take a degree here without ever talking about climate change. That really must change. It should be included in every curriculum.'

Extinction Rebellion was launched in October 2018 and got in the news when members blocked five bridges in London. It has grown fast since then, and has branches all around the world. The Wageningen branch was started in January and currently has 12 active members. The group is focusing mainly on visibility at the moment, with 'Die-ins' in which members lie on the ground in a circle with an hourglass in the middle – Extinction Rebellion's logo. 'Lying down stands for the systematic extermination of life,' says Dasoo, 'and the hourglass stands for the ticking clock.'

Extinction Rebellion Wageningen aims to stage a Die-In at a different building every Thursday. The group is also organizing a bus to take people to the national climate march in Amsterdam on 10 March. You can reach the activist group on Facebook or at [xrwageningen@gmail.com](mailto:xrwageningen@gmail.com). **LZ**

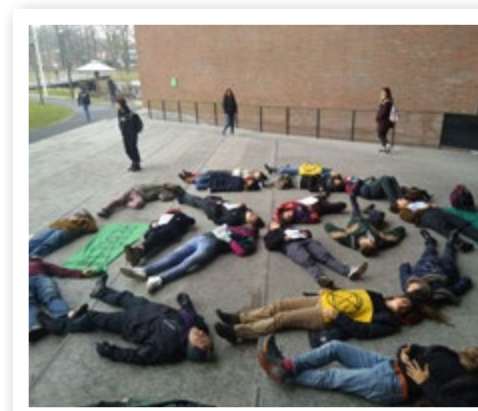


PHOTO: AMIR SOLIMAN

▲ Extinction Rebellion Wageningen's first 'Die-In' in front of the Forum. 'Lying down stands for the systematic extermination of life.'

## MEANWHILE IN... INDIA

### 'Kashmir is home to terrorist organizations'

**A terrorist bombing on 14 February saw 40 Indian troops killed in Pulwama, Kashmir, a disputed territory divided between India and Pakistan since 1948. Last week, tensions between India and Pakistan reached a new high, as Pakistan shot down an Indian jet and India retaliated with airstrikes.**

'The suicide bomber was only 22 years old; he was from the terrorist organization Jaish-e-Mohammed (JeM). With 200 kilos of explosives loaded onto his SUV, he crashed into a bus carrying 40 Indian soldiers. In the Indian army, you only get 10 to 15 days holidays every six months and these soldiers were going back to their families for their break. It is not the first time that JeM has been involved in attacks on the Indian army: in 2016, 17 Indian soldiers were killed by this terrorist cell in Kashmir as well.

India and Pakistan have been fighting over the Kashmir region since independence from the British in 1947. From what I know, there's nothing special about that region, it's just a piece of land in

the Himalayas – it's not like there are oil or coal reserves to claim. Most people there survive mainly on



Chaitanya Kakad, an MSc student of Organic Agriculture from India, reflects on current events in his home country.



PHOTO: HAFIZ AHMED / SHUTTERSTOCK.COM

▲ Family members pay their last respects to one of the victims of the Pulwama terror attack.

farming and some tourism. Perhaps the easiest way would be for the two countries to split the region in half, but things are not that simple. Kashmir is also home to terrorist organizations that kill innocent people, so it's a lot more complicated.

There are other Islamic terrorist groups besides JeM based in Pakistan. Another example is Lashkar-e-Taiba, who were responsible for the open shootings in the 2008 Mumbai attacks that killed more than 170 people. The UN have addressed Pakistan in the past, urging them to take action against terrorist groups operating in the country, but deadly attacks are still happening. I think Pakistan really needs to make the effort to sort out its terrorist problem, otherwise the peace with India is only superficial.' **GH**

# YOU ON CAMPUS

**Solina Liliane Diallo (22) is a second-year BSc student of International Development. She's just had lunch at Forum and she's catching up on her to-do list for Wageningen Student Farm.**

Recently a bunch of new people have joined Wageningen Student Farm (WSF), a communal vegetable garden at the far southwest end of campus, near Dijkgraaf. Solina: 'I need to make sure they're on the database. As secretary, I also do the newsletters, which is the most fun part, because I get to make a lot of bad jokes!'

By Thursday evening, Solina is usually pretty tired from all the lectures and projects during the week. 'But then I usually feel that life is good again, having worked outdoors for a bit during our working sessions on the farm. It sounds like a very obvious thing, but I learnt that being out in the open air could actually do me loads of good. Now, when I'm stressed I just go outside for a walk in nature. Before I started

working on the student farm, I didn't use to go out into nature often. I probably would've crashed on the couch and watched YouTube or something instead.' When she started working for WSF, organizing stuff wasn't really Solina's thing. 'I'm

**'Sometimes you just have to throw yourself in at the deep end and see what happens'**

quite a messy person. When I came to WUR a year and a half ago, most of the WSF board had moved on, so they were really looking for people. I also got on really well with the former secretary: she's a bit like me and she thought I could be a good fit. Working for a committee is a nice way to learn how to become more systematic, because I have to.'



PHOTO: GINA HO

Compared to other student organizations, WSF is not that big, Solina explains. 'Everyone more or less knows each other so it's not so bad if I occasionally slip up. It is nice to have a safe place to make mistakes and learn! Sometimes you just have to throw yourself in at the deep end and see what happens.' **GH**

## Be a bit more like a banana

**Blogger Donatella Gasparro is going bananas for bananas, and in Brazil she can't stop being amazed about the way they grow. 'It's always ready to grow again and start all over.'**

'In Europe, I hardly ever buy bananas. They come from too far, they're sprayed with too much fungicide and too often, their price is not fair to farmers, and just one variety is cultivated in monocultures all over the world. But I love them, of course I do.

### MYSTERIOUS AND POWERFUL

There are many things here in Brazil that keep my eyes wide open in surprise – mainly plants. Since the day I landed in the huge city of São

Paulo, the trees shocked me. They are magnificent, of an incredible green, displaying huge colourful flowers and festive shapes. There's something mysterious and powerful about every natural organism. It took me a couple of days to realise: it's the Mata Atlântica. 85 percent of it has been deforested, says Wikipedia, but its presence is clear, like a major force hidden in everything green.

### WALKING BANANAS

Banana plants, although somehow so familiar, were also a great surprise. They spread fast and produce fruit fast. Many varieties are grown and sold, so you can find tiny sweet ones besides the big ones we're used to. And, most importantly:

here in Brazil I have the chance to eat fresh local organic bananas: life goal met.

The leaves of this incredible herbaceous plant can be as tall as me. And the flower is so dark and big and imposing – it almost forces you to bow. They call it *o coração*, the heart. Banana plants, also, have an incredible rhizome that allows them to constantly multiply vegetatively, and to "walk". Because each of the banana kids will sprout a bit further from the banana mum, they say: "*O bananal anda*", the banana plantation moves. On top of all of this, in agroforestry systems, the banana is a fundamental ally. With its fast growth, it can produce large amounts of biomass to feed into the system and enrich

## BLOG



Donatella Gasparro is a Master's student of Organic Agriculture, from Italy.

the soil. And it's always ready to grow again and start all over, once cut back.

### BIG-HEARTED

Moral of the story: be a bit more like a banana. Big-hearted, sweet, wide open to the world; leaving places better than you found them, with strong roots but always on the move, always being reborn from the ruins.' **B**

Wageningen Master's students do internships and thesis research all around the world, getting to know their field and other cultures. Here they talk about their adventures.

# On a motorbike through Kathmandu

## THE WORKS



**Who?** Christa van Oorschot (20), BSc student of International Land and Water Management  
**What?** Internship at Nepal Engineering College  
**Where?** Kathmandu, Nepal

What I did in Nepal was like an internship and research rolled into one. I did a study on the correlation between women's say in irrigation management and male out-migration. It's common in Nepal for farmers to migrate from small villages to the big city or abroad to earn money. They then send money back to their families.

### INTERPRETER AND GUIDE


On a normal working day, I went to the Engineering College, or I sat and worked in a café somewhere. I had accommodation in Kathmandu, but if I was on fieldwork, I often slept in guesthouses, lodges or in local homes. I always had my interpreter with me during field work, and he was my guide as well. In the countryside people don't speak English so much. The women I interviewed responded to me quite positively. People are often eager to tell you things, and my interpreter was very chatty. It was always surprising how much we were told.

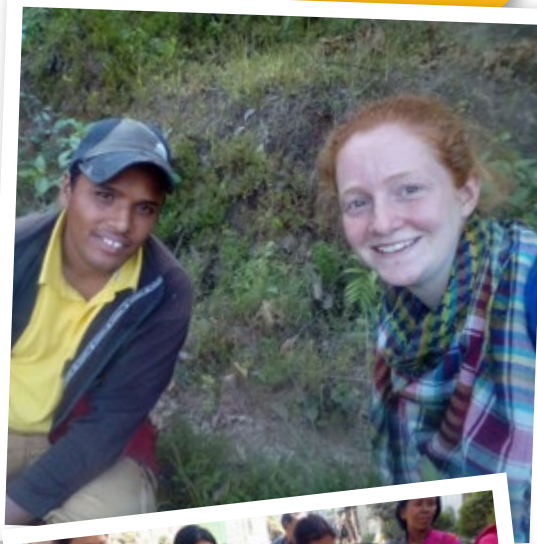
But I did have some strange experiences. One day we came into a little village somewhere where the schoolchildren were dancing to music out of doors. As soon as they saw me, they ran to me and wanted a photo. As soon as the photo was taken, they ran back again. That evening, in the same village, we were having dinner with our hostess, who was actually only two years older than me. She had made some tasty dishes, but also some things that weren't so nice. Like deep-fried fish that they ate whole, skull and all. And snails. That's a real delicacy there, so I just pretended to enjoy it.

### GETTING TO KNOW PEOPLE

I lived near two other Dutch students. I already knew one of them from Wageningen. We often ate and went out together. I enjoyed having people nearby that I could talk to about my research. And together you get to know a lot more people. We'd be going somewhere and a friend would bring along another friend of theirs.

There is lots to do in Kathmandu. It's a really big city. I rode pillion on motorbikes a lot. They've got an app in Nepal that's a bit like Uber, but just for motorbikes and scooters. You can just say where you are and someone picks you up. That gives you a lot of freedom.

I also did a trek in Pokhara with a friend. We met some other people en route and walked on together.  EvdG



More interviews  
on [resource-online.nl](http://resource-online.nl)

## In memoriam

**Piet de Visser (1940-2019)**

We were very saddened to hear that Piet de Visser passed away on Saturday 23 February. Piet meant a lot to Wageningen University and we say goodbye to him with heavy hearts.

Piet was born on Walcheren in Zeeland, and came to Wageningen in 1958 to study Agricultural Economics. After graduating in 1965, he started work in the department of Law and Governance Studies. He proved to be a truly interdisciplinary academic. As an economist in a law environment, he got his PhD in 1971 for a thesis on the phenomenon in agrarian law that non-lawyers play a role in the judiciary. Piet occupied various management positions in the university. He was manager at the Leeuwenborch, playing an important role in the renovation and the first extension of the building. He then became sector director and in 2000 director of the Social Sciences. Piet was also on the

University Council and served on the boards of sports associations, Idealis's predecessor, and social organizations. Piet fulfilled his roles with a warm heart and great sensitivity to everyone's personalities and needs. He was fair, but he held his ground. He made use of his talent for creating networks and using them to get things done. He did this with commitment and an open style of communication. He could always be found in the building and was highly approachable. The human touch was his trademark, as was obvious from the fact that he could often be found having coffee at reception. When the university and the research institutes merged to form WUR, and the department became part of the Social Sciences Group, Piet handed on the baton. We wish Piet's children, family and friends strength to bear their loss.

*On behalf of the management and staff of SSG, Jack van der Vorst, general director of the Social Sciences Group*

## In memoriam

**Wija van Staveren (1939-2019)**

Our former colleague Professor Wija van Staveren passed away last Sunday, 24 February. Wija came to Wageningen as a

dietician in 1972. Professor Jo Hautvast at TNO Nutrition got her to the university, where Wija was one of the main driving forces behind the development of the present department of Human Nutrition and Health. She helped establish two now flourishing research fields: food consumption research, and research on the nutrition of the elderly.

In 1985, Wija got her PhD for her thesis, *Food intake measurements: their validity and reproducibility*. From this point on, she played a leading role in the department in this field – which is now thriving as never before, with fast developments in the areas of biomarkers, ICT and personal feedback. The other research line Wija established was the Nutrition of the EL-

derly. Between 1988 and 2004, she held a personal chair in this field. She played a decisive role in drawing attention to the problem of undernutrition in the elderly, which resulted in numerous important theses.

Besides these activities, Wija was a prominent figure in the dietetic profession in the Netherlands, and made a big contribution to its current high standards. She was delighted to hear that there are plans to establish a chair of Dietetics. Wija was a forceful and passionate scientist with a very strong sense of responsibility and fairness. She was also a cheerful and down-to-earth personality, who has been a continuous source of inspiration to many students and researchers to this day. She will long be remembered.

*On behalf of the department of Human Nutrition and Health*

*Professor C de Graaf, chairperson*

## Announcements

### **Noldus seeks science blogger with a passion for behavioural research**

Are you fascinated by behavioural and translational neuroscience? And do you have a talent for translating scientific publications into readable popular science articles? Then you could be the blogger we're looking for! Noldus hosts the popular blog [www.noldus.com/blog](http://www.noldus.com/blog) and we have room for a few guest bloggers. We are looking for a student or PhD researcher who is up to date on recent animal sciences publications in the neurosciences, and can spare a few hours a week to write about them. Drop an email to [marcom@noldus.nl](mailto:marcom@noldus.nl), subject: application science blogger. Once we've made your acquaintance, we'll send you a scientific article to write a blog article about. If we publish your blog, you'll earn 35 euros right away! More info: Annelies Querner, at [annelies@noldus.nl](mailto:annelies@noldus.nl), or 0317 473300.

### **Vacancy Promotion Board Member Amnesty International Student Group Wageningen**

Hazal, our promotion board member will start her internship in March/April. We therefore have a vacancy on our board for the position of promotions officer. If you're interested in social media and communicating upcoming events to members, and if you like being creative and making awesome posters, please let us know! Send an email to [info@aisw.amnesty.nl](mailto:info@aisw.amnesty.nl) or visit us in the Forum Building, C439, any first and third Monday of the month during the lunch hour.

### **Postcode Lotteries Green Challenge 2019 opens: green startups can sign up**

Green startups from around the world can take part in the world's biggest annual sustainable enterprise competition. With this competition the Postcode Lotteries ensure that ground-breaking solutions that can help create a better

world really get developed and onto the market. Participating startups might offer a solution to help address climate change, the plastic problem or food waste. There is one million euros available for the five best startups, and the winner will get €500,000. You can register until 1 May 2019 on [WWW.GREENCHALLENGE.INFO](http://WWW.GREENCHALLENGE.INFO).

### **Herta Macht Thesis Prize 2019**

The thesis prize at the University of Groningen's Faculty of Spatial Sciences is for young talent and aims at promoting the cultural aspects and the social relevance of the Spatial Sciences. Participation is open to every Master's students in the Netherlands with a thesis that is no older than two years, and that received a grade of 8 or above. The prize money is €1000. More info: [rug.nl/frw/organization](http://rug.nl/frw/organization) under 'Lectures and symposia'. Deadline for registration: Tuesday 12 March.

## Agenda

**Thursday 7 to 21 March**

### **FILM HOUSE MOVIE W**

*Capharnaum*: a Lebanese drama about survival from a child's point of view.

*Sir*: an Indian drama about a love made impossible by the caste system.

*Schapenheld*: a Dutch documentary about a shepherd struggling with ideals. *Minding the Gap*: an American documentary about three skating friends growing up. *Continuer*: a French drama about a mother-son relationship. *Another Day of Life*: a Polish animation film about the civil war in Angola in 1975. *Schweigende Klassenzimmer*: a German drama about a school protest. Location: Wilhelmaweg 3A, Wageningen. €6.50/€5

[MOVIE-W.NL](http://MOVIE-W.NL)

**Saturday 9 March, 11:00**

### **WAGENINGEN GOES TO AMSTERDAM WOMEN'S MARCH**

OtherWise Wageningen and Amnesty International Student Group

Wageningen are going to the Women's March @ Amsterdam. Are you joining us to stand up for women's rights and gender equality? We believe that all people should be treated with equal respect and have equal rights. This is an opportunity to speak out! We are meeting at 11:00 at Ede-Wageningen station. The Women's March starts at 12:30 at the Amsterdam Dam Square. More info on Facebook.

**Wednesday 13 March, 19:00-22:00**  
**PROJECT FOOD FOREST: MEETING THE PRACTITIONERS**

Would you like to get involved in the development of food forests and build connections to a growing network of food forest practitioners in the Netherlands? Join Project Food Forest, a group of students that collaborates with Boerengroep and Oth-erwise. Food forest pioneer Wouter van Eck will kick off the evening with his vision, after which there will be a chance to speak with all the practitioners. Location: Impulse.

BOEREN GROEP.NL

**Wednesday 13 March, 19:30**  
**ELECTION DEBATE FOR THE PROVINCIAL COUNCIL ELECTIONS IN THE LIBRARY (IN DUTCH)**

The election evening will be introduced by Tutku Yuksel and Jelle de Gruyter. Under the chairmanship of Eric Wijnacker and Simon Vink, candidates from various parties will debate hot topics for Wageningen, such as its accessibility, and nature and climate policy. Parties that will definitely be present are VVD, PvdA, ChristenUnie, D66, GroenLinks, Partij voor de Dieren, SP and CDA. The debate will be broadcast live by RTV Rijnstreek. Location: the public library, bblthk Wageningen.

BBLTHK.NL

**Tuesday 19 March, 15.00**  
**STUDIUM GENERALE PRESENTS: HAVE THE BRITISH GONE MAD? JORIS LUYENDIJK ON THE UK MEDIA'S FRAMING OF 'US' AND 'THEM' IN BREXIT**

The image of 'the UK versus Europe' in British media is a backdrop to the Brexit chaos of recent months. What representations of 'us' and 'them' have shaped the Brexit process? How have they shifted in the public dis-

course and what can explain this? Joris Luyendijk dissects this for us in a special guest lecture. He is an award winning author, a celebrated journalist at The Guardian and an anthropologist who has spent several years embedded within the British media landscape. He has followed shifts in the public perceptions of Europe and the British national identity. From an insider's vantage point, Joris shares

his views on these shifts and their framing in the British media throughout the Brexit process. He won the NS public choice award for his book *Dit kan niet waar zijn. Onder bankiers (Swimming with Sharks: My Journey Into the World of the Bankers)*. His most recent book *Kunnen we Praten (Can we Talk)* explores the relationship between politics and society. Venue: Orion, the Spot.

WUR.NL/STUDIUMGENERALE

**University Fund Wageningen**

Aalt Dijkhuizen Fund - *Young Scientist Grant*

**Objective** Acquire high-tech knowledge at foreign research center of excellence

**Requirements** Relevant to 'how to feed 9 billion people sustainably' and the Dutch agri & food sector

**For** Postdoc researchers, PhD- and MSc-students

**Deadline** March 17<sup>th</sup>, 2019

**How to apply** [universityfundwageningen.eu/aaltdijkhuizenfund](http://universityfundwageningen.eu/aaltdijkhuizenfund)

**Call for applications**



*to connect for quality of life*





## MCB-51403: Commodity Futures & Options Markets

**Always wondered about what is happening at the trading floor of exchanges like the ones in Amsterdam, Paris, Frankfurt, London and Chicago? Wondered about how (agribusiness) companies manage their risks and improve their financial performance using commodity futures and options markets? Wondered about how it would be if you were trading commodity futures in Amsterdam, Frankfurt and Paris?**

The Marketing & Consumer Behavior Group organizes a unique course that will introduce students to commodity futures and options markets. Students will develop an understanding of the markets and how they work, gain knowledge about the theory behind futures and options markets, identify their economic functions, and develop an analytical capability to evaluate their economic usefulness. This course is taught by Prof. dr ir Joost M.E. Pennings (*Marketing & Consumer Behavior Group, Wageningen University*). There are only 40 seats available. If you are interested in taking this course (3 Credits) please register with Ellen Vossen at MCB (Room 5029, De Leeuwenborch, e-mail: [Ellen.Vossen@wur.nl](mailto:Ellen.Vossen@wur.nl), tel. 0317-483385). You can pick up the materials in Room 5029. Lecturers are on Fridays in period 5. Prerequisites: None.

## Colophon

Resource is the magazine and news website for students and staff at Wageningen University & Research. Resource magazine comes out every fortnight on Thursday.

### Address

Droevendaalsesteeg 4,  
6708 PB Wageningen  
(Atlas, building 104, bode 31).  
POBox 409 6700 AK Wageningen.  
Secretariat: Thea Kuijpers,  
[resource@wur.nl](mailto:resource@wur.nl), 0317 484020  
Website: [www.resource-online.nl](http://www.resource-online.nl)  
ISSN 1389-7756

### Editorial staff

- Anton van Elburg (acting editor-in-chief)  
[anton.vanelburg@wur.nl](mailto:anton.vanelburg@wur.nl), 06 5429 8594
- Lieke de Kwant (Magazine editor)  
[lieke.dekwant@wur.nl](mailto:lieke.dekwant@wur.nl), 0317 485320
- Roelof Kleis (ecology, social sciences, economy), [roelof.kleis@wur.nl](mailto:roelof.kleis@wur.nl), 0317 481721
- Tessa Louwerens (animals, nutrition), [tessa.louwerens@wur.nl](mailto:tessa.louwerens@wur.nl), 0317 481709
- Albert Sikkema (plants, animals, organization)  
[albert.sikkema@wur.nl](mailto:albert.sikkema@wur.nl), 0317 481724
- Luuk Zegers (students and education)  
[luukfl.zegers@wur.nl](mailto:luukfl.zegers@wur.nl), 0317-481233

### Others who work on Resource

Guy Ackermans, Juliette Berkhout, Alexandra Branderhorst, Evelien Castrop, Cathy Chen, Susie Day, Corine Feenstra, Marijn Flipse, Stijn van Gils, Eva van der Graaf, Berber Hania, Anne van der Heijden, Gina Ho, Hoger Onderwijs Persbureau (HOP), Anja Janssen, Femke Janssen, Anja Koelstra, Piotr Kukla, Helena Ligthert, Clare McGregor, Sven Menschel, Jeroen Murré, Rik Nijland, Henk van Ruitenbeek, Julia Schäfer, Inge van der Wal, Monica Wesseling, Joris Tielens, Pascal Tieman, Clare Wilkinson

**Design** Geert-Jan Bruins, Alfred Heikamp

### Translators

Clare McGregor, Susie Day, Clare Wilkinson

**Printer** Tuijtel, Hardinxveld-Giessendam

### Subscriptions

A subscription to the magazine costs €58 (overseas: €131) per academic year. Cancellations before 1 August.

### Advertising

External: Bureau van Vliet, T 023-5714745  
[m.dewit@bureauvanvliet.com](mailto:m.dewit@bureauvanvliet.com)  
Internal (reduced rate): Thea Kuijpers,  
[resource@wur.nl](mailto:resource@wur.nl), T 0317 484020

### Deadline

Deadline for submissions: one week before publication date. The editors reserve the right to edit and/or shorten announcements.

### Publisher

Marc Lamers, Corporate Communications & Marketing Wageningen University & Research



# >>TYPICAL DUTCH



ILLUSTRATION: HENK VAN RUITENBEEK

## Dinner time is sacred

**Dutch people tend to have dinner early. Actually, they have several different dinner times depending on whether they are eating at home or elsewhere. But whatever the planned time, they definitely don't want to be late for it.**

In Indonesia, people usually eat their dinner when the sky gets dark. When I first arrived in Wageningen, it was summer and the sun set late. So my Indonesian friends on the corridor and I prepared dinner together around 11:00 pm. My Dutch friend came into the kitchen to get some water and she was very surprised that we were cooking and eating that late.

A couple of months later, I asked my Dutch friend to join me for a game of badminton in De Bongerd. We had just played three short games when she said she wanted to go home. I thought she was already tired, but I was wrong. She rushed off just because she realized it was almost dinner time and she didn't want to miss it.

Another time, a German friend and I hitchhiked from Leiden to Wageningen for a conference. A very kind Dutch man drove us back. He looked at his watch and told us happily, 'You're lucky! You won't be late for dinner!' It ended with everyone in the car laughing out loud.

It is interesting how the Dutch are really disciplined about dinner time. I guess that's probably related to consideration for the people who serve them the meal. And I assume it also has to do with taking care of themselves by sticking to a healthy lifestyle. 🇮🇩 **Rio Alfajri, an MSc student of International Development Studies, from Indonesia**

**The Dutch are really disciplined about dinner time**

*Do you have a nice anecdote about your experience of going Dutch? Send it in! Describe an encounter with Dutch culture in detail and comment on it briefly. 300 words max. Send it to [resource@wur.nl](mailto:resource@wur.nl) and earn twenty-five euros and Dutch candy.*