

New business park

Major expansion of campus planned | **p.4** |

Underwater glue

If marine worms can do it, so can we | **p.10** |

Farm campsites

Russian student gets some tips from the Netherlands | **p.24** |

RESOURCE ^[EN]

For everyone at Wageningen University & Research

no 17 – 9 May 2019 – 13th Volume



‘Cool to have such an impact’


Imke de Boer shot to fame with circular agriculture vision | **p.12**

**INTERNATIONAL
EDITION**

Koen + Oxygen Pro

WUR staff work with an amazing variety of machines. This time, Koen Manusama, research assistant at Human Nutrition and Health.

PEDALLING FOR SCIENCE

No, this is not the gym at De Bongerd sports centre. This is the physio lab in Helix on campus. Where you pedal for science. Koen Manusama is using it to measure test subjects' energy expenditure and their capacity to absorb oxygen. One use for this data is to work out the impact of diets. The Oxygen Pro measures oxygen absorption and the production of carbon dioxide in the inhaled and exhaled air. Reaching your limits, or hitting the wall. The ventilator provides cooling.  RK, photo Sven Menschel

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CHAUVINISTIC JOKE?

'Oh no, we're being accused of sexism'. My colleague was somewhat embarrassed. The complaint we had got concerned a report in *Resource* 13, published on 7 March, in which a student and farmer said: 'It can be quite nice to be surrounded by 28 ladies who don't talk back.' This statement about milking dairy cows became a streamer, a quote that is printed in a larger font. Soon after the publication appeared, we were sent an email by a student complaining that it was sexist. This was followed by a heated debate on Facebook and we eventually received a petition signed by nearly 50 students and staff. 'When we make jokes,' said the collective complaint, 'we should ask ourselves: does the underlying base of the joke reemphasize a social structure that oppresses and undermines women?'

What should an editorial board do when it gets a response like that? We decided to talk to the people behind the petition. And after talking to them, we decided to ask professor and gender expert Bettina Bock whether the quote in bold, which we had thought perfectly innocent and quite amusing, really was sexist. Read the story on pages 20–21 and judge for yourself.

Willem Andrée, editor-in-chief



>> If building sandcastles is your forte, join in the competition on 23 May! | p.6

PLAN FOR MAJOR EXPANSION OF CAMPUS

The eastern section of the campus, across the Mansholtlaan, may be extended with a business park for 2000 workers. And new student accommodation is planned opposite Hoeve-stein.

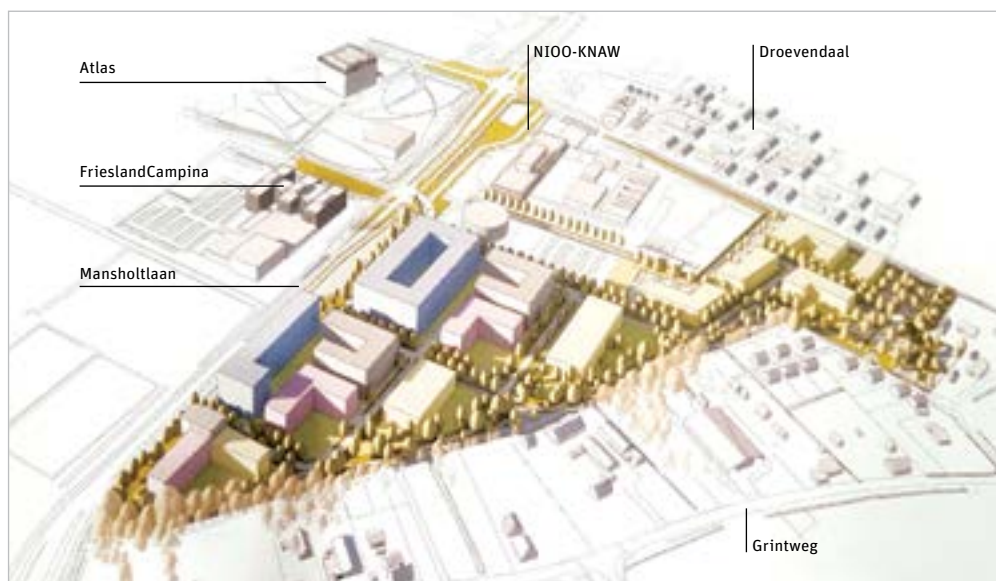
This is outlined in the provisional plans for De Born-Oost, the 10-hectare plot between the Mansholtlaan and the Grintweg. As well as NIOO-KNAW and Aeres University of Applied Sciences, the plans include another 80,000 square metres of 'knowledge-intensive business activity'. And in one corner of the plot, near 't Gesprek restaurant, Idealis wants to build a block of 200-250 student housing units.

The planned buildings will border housing

Local residents oppose the plans vociferously

on the Grintweg to the east. To avoid impinging on these residents, the buildings on this side will be the lowest, at 13.5 metres in height (three storeys). Towards the Mansholtlaan, the height of the buildings will go up to 27.5 metres (six storeys), a little lower than FrieslandCampina. To the east of the area there will also be two multi-storey carparks.

Local residents are opposing the planned developments vociferously, accusing WUR and



▲ Plans for the eastern section of the campus. The tallest buildings are along the Mansholtlaan. Bottom left in the corner, a block of student flats is planned.

the municipality of creating something like the 'Zuidas' area of Amsterdam on the Wageningse Eng, the protected landscape to the east of the Grintweg. What really sticks in their throats is the way the plan diverges from a visual quality plan for the area drawn up in 2011. In that plan, De Born-Oost was described as 'a work landscape with rural housing'.

The plans are still in the early stages and the land use plan will have to be changed first. There is a great deal of interest among businesses, says Eise Ebbelink, head of real estate at WUR. 'We are already consulting with various parties. And we're already in the advanced stages with one of them.' Construction begins next spring at the earliest and is estimated to take eight to ten years. **RK**

LECTURERS CONCERNED ABOUT EARLIER RESITS

A number of WUR lecturers are afraid they will no longer be able to go on holiday in the summer as of 2020 because the last period for resitting exams is being brought forward.

The Executive Board wants to change the resit period from August to the second and third weeks of July. Lecturers would then have 15 days to mark the exams. 'That means we would have to hand in the grades in the middle of the summer holidays,' says Food Microbiology lecturer Martine Reij. 'My colleagues and I are very concerned about the consequences for us and the administrative support staff. That would leave us with no holiday.'

The lecturers also think the proposed change would affect the time lecturers have for marking after the regular exam week in

Period 6. If the resits are brought forward, lecturers will have five days to mark those exams instead of 10 days as at present.

The Executive Board's proposal was actually intended to make sure both students and staff get an uninterrupted period for their summer holidays, says university spokesman Simon Vink. The Student Council and pro-

'That would leave us with no holiday'

gramme committees will be looking at the plan. The Executive Board is not giving any comment in the meantime.

Reij understands that moving the resits to July could be better

for students because they don't then have to give up their holidays for the resits. 'But you should at least give the lecturers until the end of August to hand in the grades. Then both students and staff can go on holiday.' **LZ**



SCHEFFER JOINS NATIONAL ACADEMY OF SCIENCES

Marten Scheffer, professor of Aquatic Ecology and Water Quality Management, has been appointed a foreign associate of the prestigious US National Academy of Sciences (NAS).

Scheffer is one of 25 new foreign associates. The professor became famous for his research on the resilience of complex natural systems. He feels honoured by this recognition by fellow scientists.

Only 19 Dutch people, of whom 12 are still living, have

ever been appointed associates in the entire history of NAS. They include the Nobel Prize winners Gerard 't Hooft, Martinus Veltman and Jan Tinbergen. This year, the Groningen Nobel Prize winner in Chemistry Ben Feringa was also made an associate along with Scheffer. 'It's an impressive list of names I'm in amongst,' says Scheffer.

Incidentally, Wageningen is well represented among the Dutch NAS associates with three of the 19 scientists. Professor of Theoretical Crop Sci-



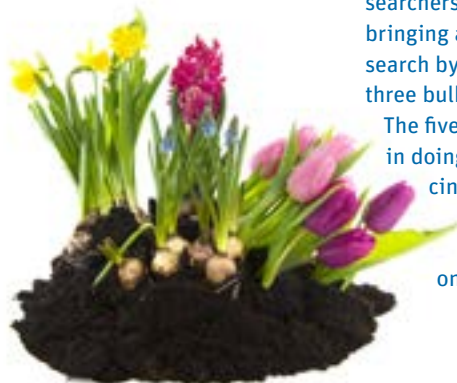
▲ Marten Scheffer: 'It's an impressive list of names I'm in amongst.'

ence Cees de Wit became an associate in 1992, one year before his death. In 1998, it was the turn of plant geneticist and emeritus professor Maarten Koornneef. **RK**

IN BRIEF

>> INTERNATIONAL GRANTS NWO funding for WUR scientists

Three Wageningen researchers have got an international grant from the NWO funding organization aimed at strengthening international agricultural research. Cees Leeuwis, Domenico Dentoni and Ken Giller have each got a grant through the Senior Expert Programme for collaboration with the research institutes of CGIAR, a global research platform for food security. Leeuwis, professor of Knowledge, Technology and Innovation, will be helping CGIAR develop a new theory on scaling up innovations. Dentoni, a researcher in Business Management, will be looking at entrepreneurial learning at two international research institutes. And Giller, professor of Plant Production Systems, will be further developing farming systems analysis in Africa with the research institute IITA. **AS**



>> GUERRILLA GARDENING 'Who did that and why?'

Persons unknown dug and planted some pop-up gardens a few weeks back at Orion. The gardens have wooden beams around them. Park manager Elike Wijnheijmer is at a loss. 'Who did that and why? I call it guerrilla gardening: removing plants without permission and putting in your own plants instead. I think it's such a pity they didn't ask permission. And what is the idea behind it?' Wijnheijmer wants to talk to the anonymous gardeners. 'Contact us, and then we can have a discussion about the greenery on campus.' **RK**

>> FLOWER BULB RESEARCH Moved to Bleiswijk

WUR's flower bulb research has moved from Lisse to Bleiswijk. Last month, the final five researchers left the experimental centre in Lisse, bringing an end to over 100 years of bulb research by WUR in Lisse. There were already three bulb researchers working in Bleiswijk.

The five colleagues from Lisse will join them in doing trials with lilies, tulips and hyacinths. They will also collaborate with the horticulture researchers at Bleiswijk, for example in research on mites and viruses. **AS**

© COLUMN | GUIDO

Hothouse plants

In the spring I sometimes grow sunflowers in a greenhouse. When the scrawny little seedlings have to go into my border, it's a tough transition. They are not used to the wind, the cold and the slugs, so a few of them do not survive that transition. With a kebab skewer and a bit of loving care I can usually coax most of them through it. When I wanted to graduate in Utrecht I went around the staff begging them on my knees to supervise my thesis. I had to come up with a plan and explain how I was going to ensure that I wouldn't need too much supervision. Alongside my job at WUR I am currently doing a course in the US and the rules are strict there too. Handed in a report too late? Tough. There are no resits and if you are too late registering for a course, well, try again next year.

'Are we preparing students for the big wide world? Or are we too kind?'

I think we take very good care of our students here in Wageningen. But I'm also afraid we might be a bit too gentle with them out of fear of not living up to their high expectations. (Just imagine if we weren't top of the league in the next National Student Survey!)

As with my sunflower seedlings, there is such a thing as an overprotective upbringing. After you graduate there won't be anything like a sample report, a mock exam or a guide to practicals. We are training students here to go out into the big wide world, and I wonder if we are doing them no favours by being so kind. The more we pamper them, the tougher the world of work will be. Of course, most of them will survive, with a bit of support. But shouldn't we aim to give them a stronger basis to start with? **R**

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

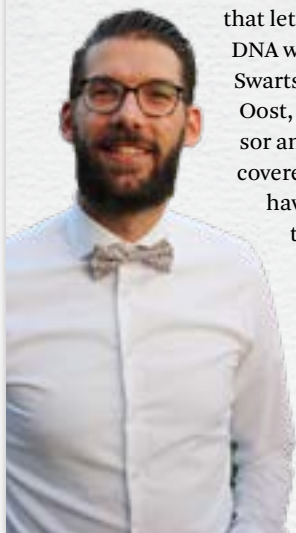


SWARTS IN THE RACE AS 'SCIENCE TALENT'

Daan Swarts is in with a chance of being the *New Scientist* Science Talent of 2019. The researcher in the Biochemistry chair group is developing new methods for modifying DNA.

Each year, the journal *New Scientist* honours the most talented scientist in the Netherlands and Flanders. Swarts is one of the 25 nominees for 2019. The winner will be announced on 31 May.

'I feel privileged to have been nominated,' says Swarts. His research builds on the discovery of CRISPR-Cas9. Researchers can use that protein, part of the immune system of bacteria, to 'cut and paste' DNA very precisely. But the protein can only make cuts in a limited number of places. In his PhD research, Swarts discovered a different family of bacterial proteins, known as Argonaute proteins, that let researchers cut DNA wherever they want. Swarts and John van der Oost, his former supervisor and the man who discovered CRISPR-Cas, now have two patents for this discovery. **TL**



◀ Daan Swarts is developing new variants of CRISPR-Cas.

Studium Generale runs sand week

HELP, WE'RE RUNNING OUT OF SAND!

Sand could be the gold of the future. We are using so much of it that it is running out. From 21 May, Studium Generale (SG) is devoting a whole week to the sand problem.

On average, a human being uses 18 kilos of sand a day. It's in cement, dams, glass, electronics, you name it... The sand used by all human beings together could form a sand embankment of 27 by 27 metres encircling the planet.

Mining all that sand has a devastating effect on the environment. UNEP, the UN's environmental organization, first sounded the alarm on this in 2014, with the report, *Sand, rarer than one thinks*. In the report, Professor Pascal Peduzzi of the University of Geneva sums up the facts about the global sand shortage. This week, on 7 May, a new report came out, in which Peduzzi discusses possible solutions.

Studium Generale has managed to get Peduzzi to come to Wageningen to talk about his ideas at *The world of sand*. The American Vince Beiser is also coming to this special week all about sand. Both experts will discuss the excessive use of sand. A range of cultural activities is also planned for the sand week, which kicks off on Tuesday 21 May with a

display of sand artistry. At the Forum an artist will create a sand sculpture and Gert van de Vijver, who draws in sand, will perform in the evening. On Thursday 23 May, students can participate in a sandcastle building competition.

Wageningen professor Ton Hoitink will introduce the documentary *Sand Wars* at a screening, and Professor Saskia van Ruth will demonstrate the sound of North Sea sand. The full programme is published on wur.nl/studiumgenerale. **RK**

Large-scale sand mining has devastating effects on the environment



DIVERGENT UNACCEPTABLE BEHAVIOUR FIGURES

A national survey finds unacceptable behaviour at universities to be much more common than the WUR Employee Monitor does. Both sources show that managers are often the cause of the problems.

According to a study by the FNV and VAWO trade unions, half of university staff think their working environment is not safe socially. And 44 per cent of women and 35 per cent of men say they personally experience problems. Those problems include gossiping, bullying and ostracizing. Professors and managers are guilty of in-

timidation and the abuse of power. But less than 10 per cent of staff experience unacceptable behaviour according to the WUR Employee

'Managers themselves are often the cause of the problem'

Monitor. Verbal violence is most common, followed by bullying and discrimination.

The trade unions only surveyed their own members at universities and institutes. The re-

sponse was 17.5 per cent. That is low, says WUR confidential counsellor Martie Wagenaar. 'Our Employee Monitor had a response of 64 per cent. What is familiar from their survey is the role played by managers. They are often the cause of the problem or they don't do enough to put an end to it.' Wagenaar says that in 2017, 70 per cent of the cases of unacceptable behaviour involved problems caused by the manager. The confidential counsellor sees support in the national study for the need to pay attention to the role of managers when creating a safe working environment. **RK**

ANIMAL AND HUMAN SCIENCE RESEARCHERS JOIN FORCES

Wageningen professors in nutrition, food technology and animal sciences will be working together to improve the quality of food. Their new cooperative venture will be called the Gerrit Grijns Initiative (GGI).

The GGI will focus on fundamental research into protein quality, personal nutrition and less processed food, explains nutrition professor Edith Feskens. 'The idea is to remove the barriers between disciplines and to be more visible for the outside world. We need more sharing and collaboration.'

The initiative is named after Gerrit Grijns (1864-1944), the Wageningen professor of Animal Physiology who is seen as the founding father of the modern study of vitamins. He was a professor in Wageningen from 1921 to 1935 and was also rector magnificus for a year. Grijns missed out on a Nobel Prize in Medicine in 1929 for his work on vitamins. Instead, the

prize went to his Utrecht colleague and mentor Christiaan Eijkman, among others.

Feskens is one of the people heading the initiative, along with Vincenzo Fogliano (Food Quality Design) and Wouter Hendriks (Animal Nutrition). The new collaborative venture is deliberately not being called an institute. Wageningen University does not have institutes, says Feskens. 'And it is not an organization with its

'We want to remove barriers and be more visible'

own separate building. We want to keep it lean and mean, to set up a structure in which you get to know one another better in line with the One Wageningen philosophy.'

So far, 30 professors have joined the GGI. According to Feskens, the idea is to use money from WUR, the two departments (ASG and

► The new collaborative venture is named after professor of Animal Physiology Gerrit Grijns (1864-1944).



AFSG) and the affiliated chair groups to invest in PhD projects aimed at collaboration. 'In addition, professors will be developing research projects together and applying for funding for them. The collaboration should be a bottom-up process.'

The GGI officially started on Wednesday 8 May. It will be presented to the general public and the private sector in the autumn in a symposium. **RK**

NEW CHAIR WANTS SMALLER WUR COUNCIL

Daniël de Jong became the new chair of the WUR Council on 17 April. He took over from Sabine Vreeburg, who is on maternity leave. The new chair wants a smaller WUR Council.

De Jong works in the Field Crops department of Wageningen Plant Research in Lelystad. He has a seat in Wageningen Research's Central Works Council (COR) and in the WUR Council, the central consultative body for all of WUR.

Within the COR, De Jong chaired the Management and Organization committee for a number of years. 'We discussed some interesting questions there, such as Imares joining the Animal Sciences Group and WUR taking over part of TNO. There were fewer topics like that in the past year so it was time for a new challenge: this chair.'

When asked what he wants to achieve in the next year, De Jong says: 'A positive aspect in my opinion is that we increasingly have good discussions with the Executive Board about issues that affect staff and the organization and that are not just linked to proposed resolutions. I would like to reinforce that. Another point is that I think the present WUR Council is too big at 26 members. It's an unwieldy, formal club. I would personally prefer a smaller WUR Council, but I don't expect that to change in the coming year.' **AS**



◀ Daniël de Jong: 'The current WUR Council is an unwieldy, formal club'

Science Cafe Wageningen
www.sciencecafe.wageningen.nl

Risky Decisions

Thursday, May 9th
Café Loburg
19:45 Live music
20:15 Science
FREE ENTRANCE

Speakers:
dr. Margot Peeters (UU)
dr. Sven Nyholm (TUE)

Sponsored by:
WAGeningen UNIVERSITY & RESEARCH
KLV
RESOURCE

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LC3URG

TEST DETECTS THREATENED SPECIES IN MEDICINES

Researchers at Rikilt have developed a test that can reveal whether any threatened species of plants or animals have been used in the production of traditional medicines.

The use of threatened plant and animal species in products is banned in the vast majority of countries. But it is not easy to enforce the law, particularly when it comes to traditional medicines. 'Our new test can identify almost all plant and animal species in a medicine at one go,' says Esther Kok, expertise group leader at Rikilt. The test can recognize certain 'barcodes'. These are pieces of DNA that occur in many animal and plant species but also vary slightly between species. The researchers tested various traditional medicines. Kok: 'The ingredients on the label of most of the products do not match the contents. Sometimes ingredients are left out, and sometimes ingredients are listed that are not in the product.' In one sample, organic matter from a threatened brown bear was found. Kok hopes the test will be ready for use within a year. There are also plans for a portable version, so inspectors can carry out the test on the spot. **TL**



IS SUSTAINABLE FELLING POSSIBLE?

What are the consequences for forests of the various methods of felling trees? Is clear-cutting as bad as Dutch nature organizations claim it is? And can you fell trees sustainably? Forest ecologist Frank Sterck is examining this at the moment in a large study on the Veluwe plateau and in Brabant province.

The pressure on Dutch forests is increasing, says Sterck. 'Forests are being harvested more and more intensively. Not just the trunks are being removed from forests, but also the branches and crowns. What consequences does that have? Can the forest recover? How many trees can you remove, in fact? These are the big questions for forest managers.'

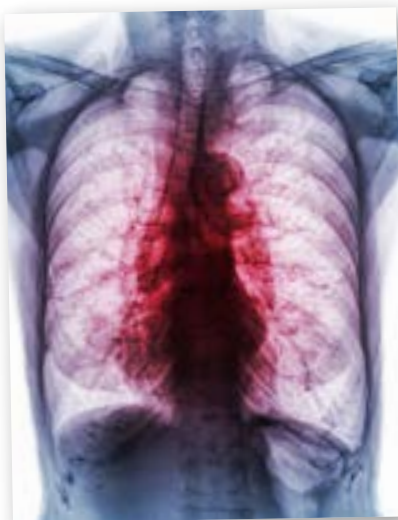
A large felling experiment involving beeches, Douglas firs and Scots pine trees aims at answering these fundamental questions. This spring, at five locations, a total of 15 plots of one hectare of woodland are being thinned. One quarter of the trees on every plot were allowed to remain standing as a control group.

The other three quarters were subjected to three different thinning methods which respectively involve leaving two thirds of the trees standing, leaving one third, or felling everything (clear-cutting).

Samples were taken from some of the felled trees to get an idea of the nutrient composition. Because that is the main focus of this project: what is the impact of all these different approaches on the cycles of nutrients and carbon? 'There are four flows of nutrients we want to analyse,' explains Sterck. 'The outflow is through felling and runoff of nutrients, and the inflow comes from deposition from the air and soil weathering.' The different forms of management determine the nutrient balance you end up with. Sterck; 'The openness of the forest, for instance, has an impact on how many nutrients are captured from the air and how many are washed away in the soil.' The experiment, which is funded by the Netherlands Organization for Scientific Research NWO, runs over three years. **RK**



◀ Forests are being harvested increasingly intensively.



▲ TB is a lung disease caused by the bacteria *Mycobacterium tuberculosis*.

VITAMIN D MIGHT HOLD TB IN CHECK

Diabetes appears to make people more vulnerable to tuberculosis (TB). In order to check the spread of this bacterial disease, it may be useful to give diabetes patients extra vitamin D, suggests a PhD study by Qiuzhen Wang.

At Human Nutrition & Health, Wang studied the link between diabetes, TB and vitamin D deficiency. A large-scale epidemiological study among 6382 tuberculosis patients in the rural Chinese region of Linyi, Shandong, revealed that the incidence of diabetes in this group was three times higher than normal.

'Diabetes may increase the risk of developing TB,' says epidemiologist Evert Schouten, Wang's PhD supervisor. 'Perhaps because diabetes suppresses the immune system, making a person more susceptible to TB bacteria.' Blood analyses among 461 TB patients showed that nearly 80 per cent of them had a vitamin

D deficiency. Amongst other things, vitamin D helps keep the immune system working well. Treatment with vitamin D reduced the symptoms, but only in the group that had both diabetes and TB.

Schouten: 'To get a better idea of the effect of the treatment, we would need to do clinical trials that build on this. Our study does indicate that vitamin D helps.' The relation between vitamin D deficiency and TB has been known for some time, says Schouten. 'In the sanatoriums in the old days, patients would be placed in the sun, but with the introduction of medication that custom has gone out of fashion.'

TB is a major problem in China. With increasing prosperity, the number of people with diabetes is going up too. Wang advises the Chinese government to screen for TB and diabetes, and to consider giving certain groups of people vitamin D supplements.

TL

HOW THE NETHERLANDS GOT GOOD AT BREEDING SPUDS

How did the Netherlands get to be a world leader in potato breeding in the past 100 years after starting nowhere? Through harmonious cooperation and the right incentives for breeders, argues 76-year-old PhD candidate Jan van Loon in his thesis.

The Netherlands was a late starter. Dutch potato growers only started crossing plants to get better potatoes in 1888, later than neighbouring countries. Then came inspections for better quality seeds and seed potatoes, a seed potato law, a national inspectorate and research projects. 'Each time, you see the government or companies taking the in-

'Breeders, the government and researchers worked together every time'

itiative and all the stakeholders getting together quickly to implement the improvements,' says PhD candidate and former potato breeder Van Loon.

For example, in the 1970s the Dutch potato sector discovered that the French were experimenting with *in vitro* multiplication, says Van Loon. Someone at the Dutch inspection service (NAK) asked the Dutch breeders and Wageningen researchers whether they shouldn't be doing that too. 'A working group was set up in no time. Three years later, the

French were coming here to see how we did things.'

Another factor was that the potato breeders were rewarded for their work. First the government set up an incentive scheme for cultivators. Finally, the Seeds and Planting Materials Act of 1967 gave breeders the exclusive rights to the potato varieties developed by them. As a result, trading companies increasingly started developing their own varieties. These 'monopoly varieties' were a huge incentive for the commercial development of the Dutch potato sector, concludes Van Loon.

The collaboration within the potato sector mainly took the form of cooperation between breeders, the government and Wageningen researchers. A nice example is the fight against potato sickness, caused by a nematode. In the 1950s, British researchers found wild potato species that were resistant to the nematodes. Dutch breeders and Wageningen researchers then worked together to breed this resistance into Dutch varieties. There were some hitches along the way, but by the 1980s they had potatoes with broad resistance. This is still used in the modern-day varieties, says Van Loon. **AS**



VISION

'Humans introduce swine fever, not boar'



There is a danger of African Swine Fever entering the Netherlands from eastern Europe. The ministry of Agriculture, Food and Nature has agreed with the pig industry that the number of wild boar in Gelderland, North Brabant and Limburg will be drastically reduced in order to halt the spread of the disease. Is there any point in that, we ask Swine Fever expert Willie Loeffen of Wageningen Bioveterinary Research.

What does the government want to achieve by culling wild boar?

'If you cull wild boar, you do so preventively to stop African Swine Fever being introduced into the Netherlands, or to ensure the virus cannot spread so easily if it does get in anyway. Culling is also one of the main methods of dealing with the virus if there is an outbreak. But let's be quite clear: African Swine Fever will not enter the Netherlands because wild boar walk here from eastern Europe. We could get Swine Fever among wild boar here for example if people start bringing infected meat from eastern Europe. Humans bring the virus in, not boar.'

But killing the boar will help stop the disease spreading?

'Yes, the fewer the wild boar, the smaller the chance that the virus gets in here. France has employed the army to kill all wild boar at the Belgian border to prevent the virus from spreading from Belgium. It remains to be seen how that will work out. The Czech Republic has successfully combatted African Swine Fever by fencing off a small area and getting police sharpshooters to kill all the boar.'

Who will have to shoot the boar in the Netherlands?

'Dutch hunters are volunteers with limited resources who want to do some nature management and practise their hobby. They don't see boar the same way pig farmers do, so can you impose on them the task of preventively shooting as many boar as possible? And do we want to go on killing large numbers of boar for years? I think the focus on Swine Fever is too limited and I would rather see a broader discussion of what we want to do with our wild boar in the Netherlands.' **AS**



PhD student learns from the sandcastle worm

UNDERWATER GLUE

Glue and water don't make a good combination. Yet PhD candidate Marco Dompé has managed to make an underwater adhesive. Thanks to nature.

Glue doesn't stick to wet surfaces. Just try putting a plaster on wet skin. But getting things to stick together underwater is not impossible. Mussels and barnacles have no trouble sticking to a surface. And some marine worms create entire structures by sticking sand and bits of shell together underwater.

BIO-INSPIRED DESIGN

This trick performed by marine worms is what Marco Dompé, an Italian PhD student in the Physical Chemistry and Soft Matter chair group, took as the starting point for his approach to developing underwater glue. This scientific field is known as bio-inspired design. 'But please note, it is not just a matter of copying,' emphasizes Dompé. 'Nature is far too complex just to copy something. What we do is to use principles from nature to create something new.'

The sandcastle worm (*Phragmatopoma californica*) uses coacervates as adhesives. 'These are materials which are formed by mixing two polymers with opposite charges,' explains Dompé.

'We use principles from nature to create something new'

'Separately, those polymers are water-soluble. But when you combine those solutions they form a two-phase system.' The charged polymers stick together and form a fluid-like substance, a coacervate adhesive that does not mix with water. This kind of glue hardens when it comes into contact with seawater, for example due to the acidity of the water or to exposure to oxygen. It depends which external stimulus the glue needs.

BODY TEMPERATURE

The external stimulus Dompé has concentrated on is temperature. That was not a random choice. The underwater glue he wants to make is intended for medical applications. It needs to be a substance that can be applied to pre-



▲ Sandcastle worms (*Phragmatopoma californica*) build shelters for themselves by sticking sand and bits of shell together underwater.

cisely the right place in liquid form and then harden in response to the body temperature. 'We have done it by attaching poly(N-isopropylacrylamide) side chains to both polymers,' Dompé explains. 'Those side chains themselves are fully soluble in water. But at elevated temperatures, they clump together and repel the surrounding water.' Arm in arm, the clingy side chains achieve the required hardening of the glue at body temperature. A physical process which is also irreversible.

HARD WORK

Dompé did not start out as an organic chemist. He studied industrial chemistry in Turin. 'Synthesizing polymers was totally new to me. It was hard work, and there were lots of ups and downs.' But the result is quite something. The glue worked exactly as envisaged on the drawing board. 'We've got the proof of concept, but the glue still has to be fully developed,' he says. 'Underwater, the glue is 10 times stronger than adhesive tape. That is not yet strong enough for medical applications, but we are on the right track. The big plus points of this glue are its thermo-responsiveness and the strength of the electrostatic interactions of the polymers.'

Meanwhile, the chair group has applied for a patent on the process. The strategy works. The rest is a question of pressing the right buttons. Dompé: 'The material you use needs to be bio-compatible and non-toxic. That depends on the part of the body where you want to use the glue.' Different polymers and side chains elicit different characteristics of the glue. The salinity of the environment in which the glue is applied is also important to the process. Dompé has done more research on that in follow-up experiments, the results of which are still to be published. Dompé hopes to graduate with his PhD in January 2020. **© RK**



◀ PhD candidate Marco Dompé: 'The underwater glue is currently 10 times stronger than adhesive tape.'

PHOTO: KOEDQUEST

Join the
Resource
debate!

Monday 20 May

Is CRISPR-Cas safe?

Dutch Spinoza laureate **John van der Oost** wants to continue discussions regarding GMOs. Is the CRISPR-Cas method that he developed safer than traditional breeding methods, or should it be controlled through strict GMO policy? Van der Oost will discuss this issue with **Jan Willem Erisman**, director of the Louis Bolk Institute, who is against the use of CRISPR-Cas in ecological agriculture, and with **Michelle Habets** of the Rathenau Institute, who advocates a 'third way' to judge the safety of CRISPR-Cas products.

Date	Monday 20 May, 15:30
Moderator	Ernst van den Ende, director of the Plant Sciences Group
Location	Impulse, Wageningen Campus

RESOURCE
For everyone at Wageningen University & Research

THE PROPOSITION

‘Without communication, science is useless’

Bananas heal cancer and vaccines cause autism. Such so-called scientific findings are prominent on the internet. Fernando García calls on scientists to take up the cudgels in the battle against misinformation.

‘Usually scientists communicate their results through journals and conferences. This is OK if we want to communicate with our peers. But I think it’s even more important to communicate with the general public. There I think scientists are failing. Nowadays, thanks to the internet, everyone has the means to communicate to a large

audience. That is good, but it has its dangers. I’ve seen some weird things, like the claim that banana peel cures cancer. And a few months ago, a herbalist advised a

‘Researchers are failing to share their results with the general public’

boy to use lavender instead of insulin, and the boy died. These junk science articles often look very professional, so it is difficult for people to tell what is true and what is



In this feature a PhD student explains the most intriguing or provocative proposition from his or her thesis. This time it is the turn of Fernando Alexander García-Bastidas who graduated with a PhD on 19 March for his research on Panama disease in bananas.

not. I think this is where scientists have a responsibility. Not all of us are good at this, and it would be crazy if every scientist suddenly became a communicator. But there will always be a few people who enjoy it. I think every research group should have at least one scientist that takes on this communicator role, working closely with the communication department. And I also think it would be good if every Bachelor’s and Master’s programme offered a science communication course.’ **© TL**

**'I was always ambitious:
I wanted to bring up my
children well'**



The meteoric career of Professor Imke de Boer

‘Really cool to have such an impact’

For a long time, work took second place for Imke de Boer. Her children came first. But as soon as they were grown up, her career picked up speed. Now, as professor of Animal Production Systems, hers is an important voice in the discussion about circular agriculture. ‘I’ve got a lot of energy. My mother often used to say: you go and run 10 times around the block.’

text Albert Sikkema photos Maurits Giesen

The going is good for Imke de Boer (52) these days. In recent years, the professor of Animal Production Systems and her colleagues have developed a new vision on the role of animals in our food system, with an emphasis on optimal use of resources (see inset: Sustainable livestock farming). This proved to fit the bill for the current agriculture minister Carola Schouten, who wants the Netherlands to take the lead in circular agriculture. So De Boer is run off her feet at the moment. She is much in demand as a speaker at events for farmers, politicians and scientists, she recently discussed circular agriculture with Minister Schouten at a meeting in Amsterdam and she and Martin van Ittersum gave the Mansholt lecture for European policymakers in Brus-

sels, on circular agriculture. Due to her full diary, we met in Impulse on Wednesday afternoon, at the end of her ‘work-at-home day’. It is a hot day and we order two cokes.

What is your greatest passion?

‘What matters most to me in life is my children, my partner and the rest of the family. That is why for a long time, I worked part-time at WUR, until my youngest child went to secondary school. I have three children: twin girls of 26 and a boy of 23. Until 2008 I worked three days a week, then I went up to four days. I only started working fulltime in 2011, when I became professor. I am pleased that I spent that time with my children.’

Were you less ambitious then?

‘Yes, that’s what people ask, as if you can only be ambitious in your job. I certainly was ambitious: I wanted to bring up my children well. I love my work, but I also loved being at home with the children. Young women sometimes ask my advice on whether they should opt for their

‘I don’t like meetings at which everyone has to have their say’

careers or their children. My answer is: there are no shoulds, you should follow your heart. For me it felt good to spend part of the week at home. I think staff with small children have a harder time of it now. I was an associate professor and of course I wanted to do my work well, but I didn't have to meet the demands of tenure track. I try to support the young members of staff in my group, but I can see that it's really tough. They all work four days a week and tenure track does put them under pressure.'

Eventually you started on tenure track yourself. Why?

'I was 44, the girls were in their last year at high school, it was a turning point. I wanted to develop further, but I wasn't planning on becoming a professor. I wanted to study the role of animals in the food system and for that, systems thinking is essential. That is the specialism of Animal Production Systems, but I saw that our group was not visible enough in the debate. That's how I started on tenure track. My first goal was to set up good quality research, in other words to look for very good PhD students and young staff. And after that it's just a question of working hard on the quality of the research.'

How did you manage that?

'I have a lot of energy. I don't have ADHD, but when I was little my mother often said, you just go and run 10 times around the block. I am also quite critical. I want to help the PhD students with everything and I try to get the best out of everybody using positive feedback. That pays off. In the past few years we've had two PhDs with *cum laude* and we got a Veni grant in our group. That hadn't happened in 25 years. Quality is the foundation.'

What kind of manager are you?

'I just act normally and try to create a pleasant atmosphere. I want an atmosphere in which everyone can express their opinions. For

instance, before a conference we give each other feedback on the presentations. I do it for them and they do it for me, we are equals. And I am happy when my staff come to me to give the sort of criticism that gets you somewhere. Sometimes I am a bit too direct and people take me to task about that. That's fine by me. I am enormously proud of the group.'

'The realization that animals are essential for effective land use was new'

Do you have lots of meetings?

'I'm not so keen on meetings; I often think they are pointless. By that I mean especially big meetings in which everyone has to have their say. I would rather talk to students and staff about their research and the personal choices they want to make. Until six months ago I did all the final tutorials with graduating students in our group, and I really enjoyed that.'

Are you too busy now?

'I am very busy now, it's true. I lecture, I supervise PhD students and I lead the group, but there are lots of other things that come up besides. A debate, a lecture, a seminar, a presentation, and so on. My problem is that I want to prepare everything carefully. So on Sunday I prepare everything for Monday and Tuesday, and on Wednesday I work at home to prepare everything for Thursday and Friday.'

You have made your name with your vision on circular agriculture.

'Yes, circular agriculture is a hit and I think it's really cool to have such a big social impact. If I have to talk at Pakhuis de Zwijger in Amsterdam, people ask me, are you Imke de Boer? They have heard of me. But that impact started with a few PhD students, who laid a good foundation for circular thinking. The realization that animals are essential for the effective use of farmland was new. Animals can convert waste flows released in the food system into valuable food. In circular agriculture, you no longer feed your animals on grain or soya.

It is nice that this vision is being recog-

nized, but that also raises expectations. The research group has got bigger, we now have 11 permanent members of staff, five postdocs and 25 PhD students. I don't want to expand any further, because I am interested in the research itself and the people. I don't know what I will want in the future, either.'

What do you mean?

'At the moment I typically work six days a week. The question is how long I shall want to go on doing that. What if I was lucky enough to become a grandmother in a few years' time? Then I might want to take a day a week off to be with my grandchildren. I've been pondering how to go about that.'

Is it hard to be a woman in the sciences?

'I studied in Breeding and Genetics, with nearly all men, and I never felt inferior and it never bothered me. I haven't felt held back as a woman and I feel I can go on growing here. I see loads of women around me having a career as well as children. It's possible. What I do wonder about is that I never hear male professors saying they want to spend a day a week with their grandchildren. Is that socially or biologically determined?'

'In hockey I made it into the national youth team'

I hear you do a lot of cycling in your spare time.

'As the child of two sports teachers, I learned to do a lot of sport from an early age. Running, horse-riding, tennis, cycling, hockey and much more. In hockey I got into the junior Dutch team, but I was kicked out because of "bad behaviour". I had drunk a couple of glasses of wine the evening before a training session and the coach did not approve – I wasn't 100 per cent focussed. Well, that was true, and I am too much of a social animal to live just for sport.

But sport is an essential element of my life. In recent years I've been cycling a lot. My partner and I have cycled from Wageningen to Prague, Berlin and Rome. Last year we cycled to the Mediterranean and this year we want to go to Vienna. We cycle about 90 kilometres a





IMKE DE BOER (b. 1966, Heerlen)

1984-1989	Master's in Animal Sciences in Wageningen (<i>cum laude</i>)
1990-1994	PhD in Breeding and Genetics
1994-2011	Associate Professor at Animal Production Systems
2011-present	Chair of Animal Production Systems

De Boer is a member of the Dutch Council on Animal Affairs, which advises the agriculture minister on animal welfare, and of the LEB Fund for supporting young WUR scientists. She lives with her partner and has three children.


▲ Imke de Boer is the daughter of two sports teachers. 'Sport is a crucial part of my life.'

day. That's what a holiday is for me, being out of doors and physically active. Sport is crucial for me to calm down. When I cycle, my mind empties. Otherwise it keeps on milling things over. In the winter I do spinning two or three times a week and in the summer we cycle about 40 kilometres in the Wageningen area a couple of times a week. That's just enough to tire me. I would like to run as well, because that tires me faster, but I can't do that anymore because I've had a hip replacement. I've got arthritis, probably as a result of a fall. I have had a lot of falls: from a horse, on the hockey field and from a bike.'

What are your plans for the next few years, as professor?

'I find I am more and more interested in the whole food system. That system is very complex so I've got a lot to learn still. How can we produce food with respect for the planet? How

can we motivate consumers to throw less food away and to opt for sustainable products? I would also like to get a better understanding of food transitions. I think it's interesting to

talk about that to fellow researchers, as well as with farmers, innovative businesspeople and thinkers such as Joris Lohman at Food Hub. Those conversations inspire me.' 


SUSTAINABLE ANIMAL PRODUCTION

Imke de Boer's chair group, Animal Production Systems, has developed a vision of a circular agriculture system in which animals play an important role. There are three key starting points: 1. Arable farming primarily produces plant-based food for humans. 2. Waste flows from the food system are reused to enrich the soil and feed animals. 3. The production and consumption of animal products is limited by the availability of grass and safe waste flows.

In this vision, pigs and chickens eat our leftovers, just as they did in times gone by, and cows produce milk on a diet based mainly on grass. But this is done using modern methods, paying attention to food safety and efficiency. This approach gives livestock a sustainable position in circular agriculture, says De Boer, and makes it possible to produce about 23 grams of animal protein per person per day. 'That means we in Europe must halve our consumption of animal protein.'

This form of livestock farming even uses less land, water and phosphorus than a vegan diet, De Boer's group calculated, because in a vegan diet you don't use grasslands or waste flows from the food industry to produce food.

CELEBRATING FREEDOM

How do you celebrate freedom? Well, you could all go and stand in a Wageningen car park, for example. Seldom has a place looked as jam-packed as here in the half hour that rapper Bizzy kept his many fans waiting during the Gelderland Liberation Festival. Although 5 May was on the Sunday before the exam week this year, that did not stop many Wageningen students enjoying the festivities. So who knows — perhaps you will spot the back of your head somewhere in the crowd.  Ldk, photo Sven Menschel





40 years of photos
reveal degradation

Five to twelve for the reef

Three quarters of the coral reef around Curaçao and Bonaire has disappeared over the past 40 years. A unique set of underwater photos makes that clear. But there is still hope of recovery, says researcher Didier de Bakker. If we take action now.

text Roelof Kleis *photos* Rolf Bak, Didier de Bakker and Erik Meesters

Didier de Bakker defended his thesis on the changes to the reef around the Caribbean islands of Curaçao and Bonaire on 17 April. The core of the study, which he conducted in the Aquatic Ecology and Water Quality Management chair group, is a unique set of photos of the reef. The first of these photos were taken in 1973 by the now

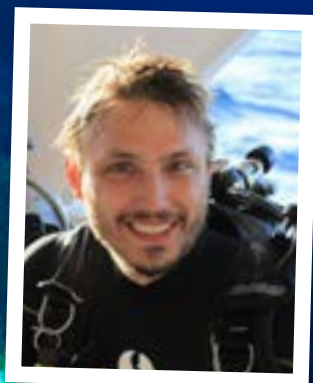
retired University of Amsterdam professor Rolf Bak. He photographed 16 sections of reef three by three metres in size, at depths of 10, 20, 30 and 40 metres off the coasts of Curaçao and Bonaire. Since then, these quadrants have been photographed almost annually up to the present day. The series is a scientific gold mine, says De Bakker. Although the picture it paints is not a cheering one. 'When Bak started, the reef still

looked healthy. Deterioration has set in since then.'

SLIMY MATS OF BACTERIA

De Bakker described in detail which species of corals can be seen on the photos and then charts the changes it has undergone over the past 40 years. His analysis shows that three quarters of the coral cover has disappeared

'Corals thrive best in poor conditions, so pollution makes them less competitive'

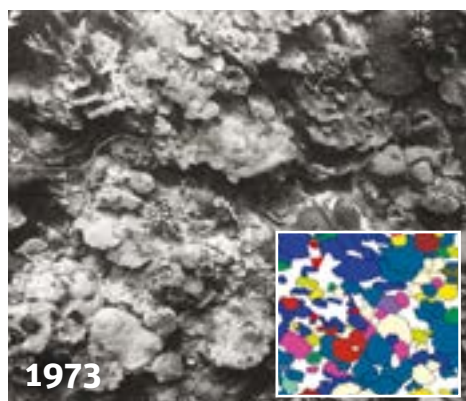


▲ Didier de Bakker: 'The reef will never again look the way it did 40 years ago, but it is not lost yet'

since 1973. The coral has made way for turf algae, macroalgae and cyanobacteria. 'The shift from coral to algae is a much-studied phenomenon,' says De Bakker. 'But the rise of cyanobacteria is new and striking. Slimy mats of reddish brown cyanobacteria are slowly taking over.'

Their scientific article about this in 2017 won De Bakker and his co-authors the prize for the best article about coral reefs from the academic journal *Coral Reefs*. The cyanobacterial mat had literally been overlooked until then. Understandably, says De Bakker. 'The focus always lies on corals and microalgae. Thanks to my inventory, I focused on the full range of species present. And I could not fail to be struck by how often I came across those cyanobacteria.'

▼ One of the sections of coral reef from the photo series Didier de Bakker analysed. The photo on the left was taken in 1973, the one on the right in 2017. The schematic insets show the presence of corals, with each colour representing a coral species.



Another factor is that red is the first colour to disappear from the spectrum under water. And the green-brown mass you then see has long been assumed to consist of turf algae.' Besides the massive loss of coral, the composition of the remaining species changed dramatically as well. De Bakker: 'Traditionally dominant species such as *Acropora* and *Orbicella* have largely disappeared, or are struggling. These true reef-builders, which lay down chalk fast and form large colonies, are making way for fast-growing species that calcify much less and do not build large colonies.' So the formation of new reef is slowing down, while the breakdown of existing reef is increasing. De Bakker: 'The red boring sponges do an awful lot of damage. They bore a hole in the coral, push their way in and devour the contents of the skeleton from the inside. They erode the chalk with acid and actively loosen and remove bits of it. This causes the reef to lose its 3D structure extra fast.'

POLLUTION AND WARMING

The reasons for the severe degradation of the coral reef are known – deteriorating water quality, over-fishing and the warming up of the sea. 'Pollution brings nutrients into the water,' explains De Bakker. 'That is good news for algae and other organisms that can grow faster if there are more nutrients. But corals thrive best in poor conditions, so pollution makes them less competitive. Pollution can also make corals less resilient to seas that are warming up due to climate change. They become stressed and more vulnerable to disease.'

Because of over-fishing, there are also fewer and fewer fish that graze on these algae on the seabed, preventing the formation of massive algal blooms, says De Bakker. 'And the large-scale loss of grazing sea urchins due to a disease in the 1980s was a setback for keeping algae down.'

But De Bakker sees glimmers of hope. He bases his cautious optimism on a second series of photos WUR started taking along the coast of Bonaire in 2014. Marine life and fish stocks are recorded photographically every three years, at 115 spots at depths of 5 and 10 metres. 'Bak's series is nice but the photos are of just a few locations, relatively close together,' says De Bakker. The new series of observations avoid these disadvantages and appear to show that the ecological degradation has stabilized. 'In a few places, the quantity of certain corals even seems to be slowly increasing a bit.'

ALL IS NOT LOST

The new measurements also reveal large local variations. The reef does best in places with the least human influence. That is the key to success, according to De Bakker: reduce the impact of human beings. 'For instance, you can make sure there is a good sewage system. Currently a lot of the islands' wastewater goes into the sea untreated. Sediment also flows from the land into the sea. By planting mangrove forests along the coast you can create natural sinks for nutrients and sediment.'

With such interventions we can improve the situation considerably, says de Bakker. 'The reef is not lost yet. The reef will never again look the way it did 40 years ago; that abundance of coral is gone. But it is not too late to preserve essential functions of coral. Only we must take action now.' ⑥

◀ Professor Bettina Bock: 'People don't like being challenged about sexism. But you don't have to be sexist to reproduce a sexist stereotype.'

'Jokes about women are rarely harmless'

Professor Bettina Bock reflects on the cow quote controversy

Was *Resource* guilty of sexism when we drew attention in large print to a joke about silent ‘ladies’? We asked Bettina Bock, professor of Inclusive Rural Development with a particular interest in gender and diversity. ‘As a society we have apparently decided that we find jokes about women acceptable.’

text Tessa Louwerens photo Stijn Rademaker/Hollandse Hoogte

The quotation ‘It can be quite nice to be surrounded by 28 ladies who don’t talk back’ prompted a complaint from 47 readers and a heated discussion on Facebook. Why do you think that was?

At first I thought: this is one of those typical Wageningen jokes: a bit banal but definitely not malicious. It even made me smile. On the other hand you have to remember that a joke like that is rarely harmless because it ridicules a group of people. By making a joke of it, you sanction and confirm the unequal position of the group in question. We don’t always stop to think about that in our society. If you constantly repeat the stereotypical image – in this case of women talking too much – you reinforce that image and the inequality again and again.’

Don’t we just need to be able to take a joke?

‘In the course of my career I’ve heard enough sexist jokes. I know those guys by now and I usually can’t be bothered to get worked up about it. But I am in an independent position as a professor. Young colleagues sometimes feel unsafe in their workplace because of those sorts of jokes, and that is the last thing you want. The university doesn’t want it, the staff don’t want it and the jokers themselves don’t want it. I think anyone who speaks out against it is brave, because they often come in for a load of criticism. And sadly, that reinforces the idea that you’d better keep quiet because otherwise you’ll be harassed even more.’

‘By repeating a stereotype, you reinforce the inequality’

A lot of women laugh at jokes like this one.

‘That’s because we have already internalized the ridicule of the stereotype. This reminds me of an advert for Always sanitary wear. In the clip called ‘Throw like a girl’, boys and girls are asked to throw a ball the way a girl does. Up to

the age of about five, girls throw normally. When they get older, both girls and boys throw in an exaggeratedly clumsy way, in line with the stereotype they have internalized: girls can’t throw a ball.’

I found the joke about the silent ladies amusing too. Does that make me sexist?


‘People don’t like being challenged about sexism because they think “I’m not like that”. But you don’t have to be a sexist person to reproduce and reinforce a sexist stereotype. You might ask yourself why you consider such a joke harmless. You would probably react differently if the joke was at the expense of a different group of people, such as refugees. It’s quite likely you would find it inappropriate. As a society, we have apparently decided that jokes about women and homosexuals are acceptable. And in fact, that everyone should find them funny and not make a fuss about them.’

But don’t we run the risk of taking political correctness too far if we can’t accept such jokes anymore?

‘I don’t think so. I am currently working as a guest professor at the University of Cornell in the United States, and I am struck by how sharp they are here on equality and diversity. Every new member of staff watches a 45-minute video on sexual discrimination. The film explains what you should do if you encounter sexism and your responsibility as a teacher to protect your students. Here the rector responds personally to every incident and openly expresses her disapproval, because equality is one of the university’s core values. I think WUR has the same values, but compared with Cornell, we don’t draw attention to them or take responsibility for them as emphatically. I think we in the Netherlands and at WUR sometimes underestimate the importance of this.’

So there is still much to be achieved?

‘Absolutely. The position of women at WUR is not great. When it comes to the number of

women professors, we are lagging behind. In recent years, WUR has made more effort to increase the number of women professors and of foreign scientists. But there is still not much awareness of the importance of equality in day-to-day interaction.’ 

‘HUMILIATING AND SEXIST’

In number 13 of 7 March, *Resource* published an interview with a student who wanted to go into farming. When talking about milking the cows, he said, ‘It can be quite nice to be surrounded by 28 ladies who don’t talk back.’ This translation of the Dutch quote did not go down well with nearly 50 students and staff, who sent a complaint to the editors. They called the joke ‘humiliating and sexist’. ‘The quote is based on the normalization of female subordination in the agricultural sector. (...) Wanting women to not talk back means wanting women to not speak up for themselves.’ After consulting several of the signatories, *Resource* decided to ask a professor who knows a lot about gender to reflect on the issue. Even though she is on sabbatical in the US, Bettina Bock was prepared to do so.



‘It can be quite nice to be surrounded by 28 ladies who don’t talk back’

and your cows can turn grass – into milk, which is nearly all the essential –



DO YOU WORRY ABOUT YOUR STUDENT DEBT?

Since the abolition in 2015 of the basic grant all Dutch students used to get, students have suffered more financial stress and seek help with debt problems more often, a study by the social credit branch association said last month. In Wageningen, too, students get into debt in order to do a degree. And that sometimes gives them headaches.

text Luuk Zegers illustration Henk van Ruitenbeek

Charlotte van der Zon (23)



MSc student of Food Technology

'I sometimes worry about my student debt. During my BSc programme I was still getting a basic grant through the old system and I borrowed a little bit on top of that for nice activities. Now I borrow the same amount of money I was getting then, so the debt mounts up a lot faster. I'm not worried about paying it off as such, because that will be between 70 and 100 euros a month. That is doable. **But I do want to be able to buy a house and a student debt can easily make a difference of 30 to 40 thousand euros on a mortgage.** I do worry about that. And if you want to go away for a weekend, or go out for a meal, money plays a role. Sometimes you just can't do it. Then I try to make sure I can do it the next month. You should have a bit of fun while you're a student.'

'I don't know how paying back your debt will work'

Lena van der Sman (19)



BSc student of Environmental Sciences

'If I look up my debt on My DUO, I think, oh yes, I've got to pay that back some time. **As an environmental scientist I will probably get a job, but the question is how much I will earn.** And I am not clear about how paying back the debt will work. The government says: we'll take the basic grant away. But they don't make sure it is clear to students how much we are going to have to pay back.'

Tom van den Brink (24)



Did the Master's in Public Management at Utrecht University and is chair of the Dutch National Students Association, the ISO

'Students worry about the growing financial burden. That is not just due to the loan system: tuition fees are going up, the increase in VAT is making everything more expensive, and the government wants to increase the interest on student loans. These are worrying developments. The ISO published a study in January in which it comes out very clearly that there is a link between borrowing and wellbeing among students. **Students who borrow are more often extremely tired, suffer more psychological problems and worry more about finances than those who do not.** Also, many students opt out of social activities because they are too expensive. When the loan system was introduced it was said repeatedly that it wouldn't have a negative effect on access to education. But you don't take out a loan lightly if you know that your student debt will have a massive impact on the mortgage you can get later. More and more students suffer from stress and psychological problems. That is a big concern for our society.'

Eva Koppius (20)



BSc student of Biology

'I don't get very stressed because I think 30 years is long enough to pay off my student debt. **In retrospect I might have preferred to study a different subject, but I'm not going to change degree programmes now.** I think people who really make the wrong choice do still switch programmes, but if you've chosen a programme that's "OK", the fear of higher debts puts you off switching and you play it safe.'

'On My DUO you see how much debt you've built up. Not nice'

Anna Murashova (20)



BSc student of Economics and Policy

'When you log in on My DUO, you see how much debt you've built up. That is not very nice. I get a supplementary grant and borrow the maximum. Sometimes I still run short of money. Recently, for instance, I had extra healthcare costs and other unexpected costs.

That causes stress. Because of needing extra time I will probably take three and a half years over my degree. **I've been asked to be on the board of the student union Student Alliance Wageningen, but I'm not going to do it.** I don't want to take even longer, because the longer you take, the more debt you have.'

Roos Verstegen (22)



MSc student of Nutrition and Health and member of the Student Council party VeSte (speaking in a personal capacity)

'Of course I occasionally worry about my student debt, but I am mainly focusing on my student life now. Developing myself is so important to me that I will be borrowing for an extra year so as to serve on the Student Council. Other than that I don't do anything extravagant: I live within my means. I don't go shopping much and only go on holiday in the summer. A student debt has consequences later if you want to buy a house. But I hope that if the generation of students before me managed it, so can I. And then I am lucky that I started on my Bachelor's programme in 2014, so it's only my Master's that comes under the loan system. That makes a difference. **Study associations and student societies are finding it increasingly difficult to get board members. People want to do it, but taking an extra year costs money.** And there are a lot of students who don't know exactly how much their debt is going to cost them. We saw that from the reactions we got at our well-attended information evening on student debts and loans in Impulse.'





‘Spying’ at the farm campsite

Thesis research entails sweating in the library, doesn't it? Not for Marina Boldryeva (29). This Russian student slept in a tent, milked cows and made cheese. ‘I wanted to know what agritourism looks like in the Netherlands.’

text Luuk Zegers *photos* Marina Boldryeva and De Blökke campsite

You wrote your thesis about agritourism in the Netherlands. Unusual for a Russian student.

‘People associate Russia with nothing but snow, bears and vodka. So I want to develop rural tourism in Russia so people can discover the beauty of my country, with its hot summers, beautiful forests and wide open spaces. I am a great believer in the healing power of nature. Physical activity, fresh air and a natural environment help people get rid of stress. Agritourism is a good way of experiencing the peace of the countryside, and it is an additional source of income for farmers. That is already happening in the Netherlands. I think it would be nice to get it going in Russia.’

‘People associate Russia with nothing but snow, bears and vodka’

What did you research, exactly?

‘What agritourism looks like in the Netherlands. Do farmers put on a performance or do they show people what life on a farm is really like? I went to three holiday farms. At the first, a goat farm with a campsite, tourists can learn how to milk goats and make cheese. The second farm I visited is similar, but then with cows. The tourists who go to these farms want to experience farm life. The third farm I went

to is different from the first two. Instead of a campsite, there was a Bed & Breakfast. Guests don't go there to experience farm life so much as to enjoy the rural scenery and the fresh air. It is more of a place for luxury-lovers.’

How did you like your stay on the Dutch farms?

‘My parents live on a farm, so it wasn't a totally new experience for me. What was special was that I was allowed to help milk the cows and goats. And I had never slept in a tent before. It was very cold but after the milking I slept like a log. One of the highlights for me was the cheesemaking. As a child I always associated the Netherlands with cheese and potatoes. They make the best cheese in the world here.’

'I think it would be nice to develop agritourism in Russia'

It is great to be allowed to do that yourself. I did think it was a pity that none of the farms I went to offered a traditional farmhouse meal. That is something I *would* do.'


What lessons will you take back to your home region if you start working on agritourism there?

'Farm tourists enjoy the chance to eat the produce of the farm. So if cheese is made there, show how you do that and sell the product to your guests directly. Secondly, it is good to have a campsite and to rent out a few tents or caravans to people who don't have one of their own. And I think the Russian countryside has a few nice extras to offer tourists. Traditional Russian food, for example and, of course, the saunas. But there are challenges as well, such as the language barrier. Not many Russian farmers speak English. That makes it less attractive for international tourism.'

Are you going to apply these lessons to your parents' farm?

'My parents keep a few animals to have provide their own meat and dairy produce. But they also have day jobs, so I don't think they will start up tourist activities as well.'

Why did you choose Wageningen?

After getting my degree I worked in Russia as an accountant in the tourism sector, but I had a strong wish to go abroad and get a broader perspective on tourism. I applied for a grant and applied to several tourism Master's programmes in Europe. I was accepted at Wageningen and got financial support until I graduate. Paulo Coelho once wrote, "If you want something, the universe will work with you to help you achieve it." That is my motto, and this experience confirms it.' 

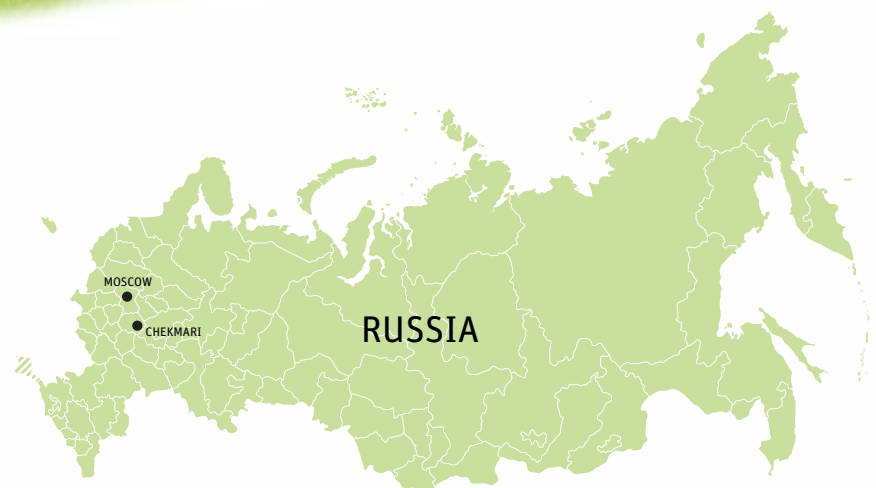


WHO IS MARINA?

Marina Boldryeva (29) comes from Chekmari, a little village in the district of Tambov, south-east of Moscow, where she grew up



on a smallholding with two cows, two pigs and a few chickens. She came to the Netherlands for the WUR MSc in Tourism, Society and Environment. 'I have a goal: to develop rural tourism in my home region after I graduate.'



PRAWN COCKTAIL

Freshwater prawns in the waters of Suffolk county in England turn out to have small quantities of cocaine in their bodies. This has been discovered by researchers at King's College London. They're not exactly stoned, but still. And Suffolk is a sleepy county. What are London prawns like, I wonder?

SQUARE

The square of two is four. Carry on 80 trillion more times and you get a very big number. And with that number you can solve the cryptographic puzzle thought up by Ron Rivest of Massachusetts Institute of Technology (MIT) in 1999. The Belgian programmer Bernard Fabrot cracked it last month, more than 10 years sooner than Rivest thought possible. It only took the Belgian three and a half years. He will be rewarded on 15 May with the contents of a time capsule incorporated into an MIT building in 1999.

HIPPO POO (1)

Hippos do nothing but loll about in the water all day, or so it seems. Not so. They are busy digesting their nocturnal grass meal. And they excrete half of it in the process, shows research by the German Helmholtz Centre. Dirty? No, useful.

HIPPO POO (2)

The hippo poo is the source of three quarters of the silicon deposited in rivers, the scientists have discovered. And without silicon, the food web would collapse. So it is extra bad news that 90 per cent of the world's hippos have disappeared in recent decades. Another reason to look after the Big Five.



Student Council elections coming up

Meet the leading candidates



Three student parties will do battle from 20 to 23 May for the 12 seats on Wageningen's Student Council, which defends the interests of students. The three leading candidates introduce themselves and explain why you should vote for their parties.

'Enough computers for everyone'

Harm Ligtenberg (21), CSF (Christian Student Party)

'There is talk of a new policy in which everyone will bring their own laptops to campus: Bring your own device. That is something I am very critical of and which I would want to oppose. I don't have a portable device myself and there are others in the same boat. There just should be enough computers for people to work on. I don't think it's a good idea to let students bear the financial consequences of growth. After three years in Wageningen I know what it is like to be a student here and what problems people run up against. Now I can start making an active contribution to policy.'



'Less stress, more integration'

Yichun Zhou (23), S&I (Sustainability & Internationalization)

'With S&I, I want to improve sustainability. Not just environmental sustainability but also "inner human" and inter-human sustainability. By inner human sustainability I mean the mental wellness of individuals. There is a lot of stress among students, and we should do something about that. Inter-human sustainability stands for cultural integration, a sustainable student population that helps international students to adapt and settle faster and better in Wageningen.'

There is a housing shortage and there are not enough places to study. Students wonder why the university keeps accepting so many new students while there is already a shortage of space for them now. If I'm elected, my main concerns will be the quality of student life and of the university.'



'Preserve the small-scale ambience'

Sophie Kuijten (21), VeSte (United Students)

'One of my priorities is to preserve the small-scale ambience and the quality of the education. There must be enough teachers for the number of students. VeSte stands for the broad development of students: they need to be able to develop themselves outside the classroom as well. Since the loan system was introduced, students have started thinking twice before they commit themselves to a committee or a board. We want to motivate them to keep on doing those kinds of things. You learn such a lot from it: working in a professional environment, speaking in public, and so on. You benefit from that for the rest of your life.' @ LZ



Read more extensive interviews with the leading candidates on resource-online.nl

‘University should support our rebellion’

The campaign group Extinction Rebellion (XR) will be organizing a climate march from the campus to the town hall on 17 May. The aim is to get the university and town to take action, says Malik Dasoo of XR.



▲ Extinction Rebellion organizes climate marches around the world, for example in London in November 2018.

Why organize a climate march in climate-aware Wageningen?

‘Sure, there is already a lot of awareness in Wageningen. But awareness alone is not enough anymore. WUR may be a leader in sustainability, but we think that it is time for more urgent measures to deal with the climate crisis. And for that, both the university and the government need to acknowledge that we are in a crisis situation. On this march, we will hand over our demands to the university and the mayor of Wageningen.’

What demands are these?

‘The government should implement new laws to reduce greenhouse gas emissions to zero by 2025. Polluters should pay for the environmental and social damage they cause. And we need a major climate programme to finance the necessary measures. Universities should make their position clear by announcing that we have a climate crisis. Climate change should be part of all curricula. Universities should be climate-neutral by 2025. We are also demanding that the universities support our rebellion.’

What will count as a successful march?

‘I hope we can gather up to 200 people for this march. I would like to invite everyone to join us, even if you have a class or have to work. For what’s the point of studying in Wageningen if politicians are not listening to our leading scientists?’ **© LZ**

MEANWHILE IN... SRI LANKA

‘Despite these attacks I have hope for my country’

On Easter Sunday, Sri Lanka suffered its deadliest act of violence since the end of a 26-year civil war in 2009. At least 253 people were killed in six suicide bombings at churches and hotels in the capital, Colombo. Elackiya Sithamparanathan, who is doing her PhD in Wageningen, is shocked. It makes no sense.’

‘The suicide attacks happened around 8:30 in the morning. Here in the Netherlands it was about 5:00 in the morning, so I found out after I woke up and checked Facebook. Later that morning, my sister called and told me all about what happened. I am from Jaffna, in the north of Sri Lanka. My father and my sister are living there and I am glad that they are safe. But I have many friends in the south, where the attacks took place, so I started contacting them straight away. Luckily, all my friends and their families are safe.

I am really shocked by the attacks, as they are the worst since the end of the civil war. The authorities officially stated that it was the Islamic group NTJ that was responsible. But they must have had the support

of ISIS, as the group has claimed in a video they released. I really don’t understand their purpose; it makes no sense.



This is the worst attack ever against Sri Lanka’s Christian minority. There is no connection with the previous civil war, as that was about nationalism and ethnic identity rather than religion. The different ethnic groups in Sri Lanka used to be really disconnected from one another, but this is now changing, mainly due to social media. Nowadays, everyone has access to the other ethnic groups’ perspectives and we realize that we have many things in common.

Despite these horrible events and the existing tensions in Sri Lanka, I have hope for my country. The young generation are accepting the diversity and they want unity. If people keep that positive mentality, things will move forward and my beautiful country will become a peaceful nation.’ **© IA**



Elackiya Sithamparanathan, a PhD researcher in Environmental Technology, reflects on the recent events in her home country Sri Lanka.

YOU

ON CAMPUS

There are more than 12,000 students on the campus in Wageningen. What keeps them busy? For each edition, *Resource* asks a student picked at random.

Lisa Govers (23) is working day and night on her ACT project. It is her last assignment in Wageningen. Next week this MSc student of Plant Sciences is moving to Delft.

The much-feared ACT (Academic Consultancy Training). Lisa is working hard on it at the moment. 'We are doing a project about plant-based massage oil. Luckily we have a nice group, but it is quite tough.' ACT is Lisa's last stop in Wageningen. 'I am moving to Delft, where I am going to do an internship at the phytopathology department of a large seed-processing company. Actually that doesn't have much to do with my specialism: I do breeding and genetics. But the internship I had applied for was already taken, and then the company offered me this one. Which I thought was interesting too.'

Lisa has mixed feelings about her move. 'On the one hand I am looking forward to a new start and a new city. But it is a pity to leave my friends here behind. And I shall miss the nature here. I live on campus and I only have to walk 500 metres to be in the countryside.'

'At home I was pushed to aim high'

Lisa hopes she'll be offered a job or a traineeship after her internship. 'So I've got something stable at least. Where do I want to live then? Where there are people. Nowhere remote. My social life is far too important to me. You shouldn't live to work, but work to live.' But in spite of this attitude,



PHOTO: ANNE VAN DER HEIJDEN

Lisa is a serious student. 'That's because at home I was pushed to aim high. My father didn't go to university and he regrets that. So he always encouraged my brother, my sister and me.' **EvdG**

'Recipe for a new farm: plans, creativity and a pinch of courage'

Blogger Donatella Gasparro watches a dream come true at an urban farm started by a group of young people, including one of her fellow students.

'Last month we went on a very special field trip with the Organic Agriculture Master's: we visited an urban farm that was started this year by a group of young people, including one of us, an MOA student. We had a delicious home-made lunch, competed in weeding contests and had a farm tour.

It was so cool to be given a tour by one of us on their brand new farm: it's like seeing a bit of a com-

mon dream come true for us all through just one of us. We've been talking about this so much. It's a good sign that farms like this exist, and that MOA students also take

'Do we need more young farmers? Well, here they are'

this path and directly put into practice what they've learned.

Do we need more young farmers? Well, here they are. Do we need to connect cities and farms? They're just outside Amsterdam. Do we

need more community support for farmers? They're a CSA (community supported agriculture). What more do we need? A lot of plans and creativity. And a pinch of courage.

PART OF THE SOLUTION

I see this as a success for my group and I'm so curious to see where we'll all be in five to 10 years. I imagine how we will spread all over the world, contribute to positive change, and be part of innovative and pioneering companies. Some will go back home, some will stay in the Netherlands. But wherever we end up, I'm sure we'll all be part of the solution.' **B**

BLOG



Donatella Gasparro is a Master's student of Organic Agriculture, from Italy. You can read all of her blogs at resource-online.nl.

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.

A different beach every weekend

'I am used to being away from home for a longish period. When I was 20 I came to university in the Netherlands from Germany and I spent six months in Portugal on an Erasmus exchange. During my four-month internship in Curaçao I made a vegetation map of the Christoffel Park, with two other Wageningen students. We researched what plants grew there and how the species composition has developed over the past 30 years.

EVERYTHING TOGETHER


I hardly knew the other two students at all. We had literally met once in the Netherlands. But from the moment they picked me up at the airport – they had arrived a week earlier – we did everything together. Working, cooking, having fun at the weekend. We lived together in one house too. That was intense, but nice: you get to know each other really well. You see each other's ups and downs, especially during the fieldwork.

The research institute where we did our internship, Carmabi, is mainly known for its marine biology, so I learned a lot about the island's aquatic ecosystem. In our spare time we did a lot with the other students at the research institute and the staff at the diving shop, where I got my open water diving badge. Most of them were Dutch. I was glad we were working with a Curaçaoan in the laboratory. I had nice discussions with her about Curaçaoan culture and the differences between Germany, the Netherlands and Curaçao.

COLONIAL PAST

We shared a car. We had to drive half an hour to get to the park to do our fieldwork every day. That was pretty much the other side of the island. We went to a different beach every weekend. And once I took the bus. I didn't know exactly where I was meant to be, but everyone was very helpful. In the end the bus driver dropped me off almost outside my house.

You have to know a bit about the history of

Curaçao to understand its present-day culture. Of course I know Curaçao was a Dutch colony, but I hadn't really given it much thought beforehand. Once I was there, I began to understand it better. There are still tensions. People in Curaçao often think the Dutch get too uptight and come and tell them how they should do things. Whereas the Dutch often think people in Curaçao are too relaxed. I think they both have a point.'  EvdG



THE WORKS

Who? Florence Schrerer (23), Bachelor's student of International Land and Water Management
What? Internship at Caribbean Research and Management of Biodiversity (Carmabi)
Where? Willemstad, Curaçao

Do you too have a nice story about your internship or thesis research abroad?
 Email lieke.dekwant@wur.nl.

Irregular Opening Hours – May and June 2019

Forum

	2019	The Building	The Library	Student Desk	IT Service Point	WURshop	Restaurant	Grand Café	Wageningen in'to Languages
Monday	27 May	8 am - 11 pm	8 am - 10 pm	10 am - 5 pm	8 am - 5 pm	9 am - 4.30 pm	8 am - 7 pm	8 am - 5 pm	9 am - 5 pm
Tuesday	28 May	8 am - 11 pm	8 am - 10 pm	10 am - 5 pm	8 am - 5 pm	9 am - 4.30 pm	8 am - 7 pm	8 am - 5 pm	9 am - 5 pm
Wednesday	29 May	8 am - 11 pm	8 am - 10 pm	10 am - 5 pm	8 am - 5 pm	9 am - 4.30 pm	8 am - 7 pm	8 am - 5 pm	9 am - 5 pm
Thursday Ascension Day	30 May	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Friday	31 May	8 am - 11 pm	8 am - 10 pm	Closed	Closed	Closed	Closed	Closed	9 am - 5 pm
Saturday	1 June	10 am - 6 pm	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed
Sunday	2 June	10 am - 6 pm	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed
Monday	3 June	8 am - 11 pm	8 am - 10 pm	10 am - 5 pm	8 am - 5 pm	9 am - 4.30 pm	8 am - 7 pm	8 am - 5 pm	9 am - 5 pm
Tuesday	4 June	8 am - 11 pm	8 am - 10 pm	10 am - 5 pm	8 am - 5 pm	9 am - 4.30 pm	8 am - 7 pm	8 am - 5 pm	9 am - 5 pm
Wednesday	5 June	8 am - 11 pm	8 am - 10 pm	10 am - 5 pm	8 am - 5 pm	9 am - 4.30 pm	8 am - 7 pm	8 am - 5 pm	9 am - 5 pm
Thursday	6 June	8 am - 11 pm	8 am - 10 pm	10 am - 5 pm	8 am - 5 pm	9 am - 4.30 pm	8 am - 7 pm	8 am - 5 pm	9 am - 5 pm
Friday	7 June	8 am - 11 pm	8 am - 10 pm	10 am - 2 pm	8 am - 5 pm	9 am - 2.30 pm	8 am - 2 pm	8 am - 5 pm	9 am - 5 pm
Saturday	8 June	10 am - 6 pm	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed
Whit Sunday	9 June	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Whit Monday	10 June	10 am - 6 pm	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed

During working hours, the building is open to the public. After working hours, entrance is only possible with a WUR card.

Orion

	2019	The Building	Bike basement	The Spot	Restaurant
Monday	27 May	8 am - 7 pm	8 am - 9 pm	8 am - 8 pm	11.30 am - 2 pm
Tuesday	28 May	8 am - 7 pm	8 am - 9 pm	8 am - 8 pm	11.30 am - 2 pm
Wednesday	29 May	8 am - 7 pm	8 am - 9 pm	8 am - 8 pm	11.30 am - 2 pm
Thursday Ascension Day	30 May	Closed	Closed	Closed	Closed
Friday	31 May	8 am - 6 pm	8 am - 9 pm	8 am - 8 pm	11.30 am - 2 pm
Saturday	1 June	Closed	Closed	Closed	Closed
Sunday	2 June	Closed	Closed	Closed	Closed
Monday	3 June	8 am - 7 pm	8 am - 9 pm	8 am - 8 pm	11.30 am - 2 pm
Tuesday	4 June	8 am - 7 pm	8 am - 9 pm	8 am - 8 pm	11.30 am - 2 pm
Wednesday	5 June	8 am - 7 pm	8 am - 9 pm	8 am - 8 pm	11.30 am - 2 pm
Thursday	6 June	8 am - 7 pm	8 am - 9 pm	8 am - 8 pm	11.30 am - 2 pm
Friday	7 June	8 am - 6 pm	8 am - 9 pm	8 am - 8 pm	11.30 am - 2 pm
Saturday	8 June	Closed	Closed	Closed	Closed
Whit Sunday	9 June	Closed	Closed	Closed	Closed
Whit Monday	10 June	Closed	Closed	Closed	Closed

Leeuwenborch

	2019	The Building	Coffee Bar/Restaurant	The Library
Monday	27 May	7 am - 10.30 pm	8 am - 5 pm	8.30 am - 6 pm
Tuesday	28 May	7 am - 10.30 pm	8 am - 5 pm	8.30 am - 6 pm
Wednesday	29 May	7 am - 10.30 pm	8 am - 5 pm	8.30 am - 6 pm
Thursday Ascension Day	30 May	Closed	Closed	Closed
Friday	31 May	7 am - 10.30 pm	Closed	Closed
Saturday	1 June	8 am - 5.30 pm	Closed	Closed
Sunday	2 June	Closed	Closed	Closed
Monday	3 June	7 am - 10.30 pm	8 am - 5 pm	8.30 am - 6 pm
Tuesday	4 June	7 am - 10.30 pm	8 am - 5 pm	8.30 am - 6 pm
Wednesday	5 June	7 am - 10.30 pm	8 am - 5 pm	8.30 am - 6 pm
Thursday	6 June	7 am - 10.30 pm	8 am - 5 pm	8.30 am - 6 pm
Friday	7 June	7 am - 10.30 pm	8 am - 5 pm	8.30 am - 5 pm
Saturday	8 June	8 am - 5.30 pm	Closed	Closed
Whit Sunday	9 June	Closed	Closed	Closed
Whit Monday	10 June	Closed	Closed	Closed

After 6 pm entrance is only possible after registration at the reception desk.



WAGENINGEN
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Agenda

Friday 10 May, 14:15-17:45 'FLOURISH IN DIVERSITY' – SPECTRUM SYMPOSIUM

The topic of the symposium is the ability to recognize the opportunities in social and cultural diversity and how to overcome prejudices. Arjen Wals and Ariel Ennis discuss transformative learning and the importance of debating. Theatre-maker Emke Idema presents an interactive life-size board game about what happens when you see an unknown face. Venue: Impulse building. Register via email: didi.demildt@wur.nl.

SPECTRUM-WAGENINGEN.COM

Friday 17 May, 10:00-17:00 NATIONAL DAY OF COMMUNICATION 2019: 'CONTROVERSY & DIALOGUE'

The National Day of Communication (NDC) is organized each year by a different communication science-related study association. The NDC 2019 is organized by Ipso Facto. Keynote speakers are: Cees Leeuwis, Hedwig te Molder, Rico Lie, Marie Garnier Ortiz (WUR), Rens Vliegthart (UvA), Lisa van de Berg (RU) and Nicoline de Heus (BUAS). In addition there are interactive sessions in which you'll discover how to implement a dialogue when discussing challenging topics. Host of the day is Emma Holmes. Venue:

Forum building. Tickets (€5 including lunch) are available via the website.

NDCNL.COM

Tuesday 21 May, 12:30-13:20 WAGENINGEN WRITING LAB LUNCH WORKSHOP 'PLAN FOR SUCCESS'

How do you start on your writing assignment in an effective way? That's the question we aim to address during this workshop. We will provide you with the theory behind the writing process and guide you in applying this theory to your own assignment. Don't forget to bring your assignment! Be on time, as participant numbers are limited to 20. Free admission. Venue: Forum, CO406. Info: info.wageningenwritingLab@wur.nl

Colophon

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Marc Lamers, Corporate Communications & Marketing Wageningen University & Research



In memoriam

Henk van Espelo



Henk van Espelo passed away on Saturday 27 April. For years, Henk gave us unfailing support in the Leeuwenborch, making copies of our readers and lecture notes and arranging for all the other printing we needed as well as painstakingly ensuring there were enough copies of all the exams. Henk was someone who liked

routine. He always came in and went home at exactly the same time. That was how he ran his life: he liked a predictable pattern. He loved his work and his contact with his colleagues. He thoroughly enjoyed the period in which he worked with Chris Posthouwer, Gert Hakstege and Sjaak Alderliesten. He loved the jokes he shared with Frans van de Goot and Theo Jansen, and exchanging football experiences with Paul Hebinck. And last but not least: reading and writing with Piet de Visser. Henk began to find working at the

Leeuwenborch difficult in the last few years, so he retired. But in retirement too, it was hard to establish a new routine so he regularly did the rounds of the photocopiers in the building and had a chat with colleagues. Henk worked for 49 years, and in the Leeuwenborch from the day the university moved into the building. He was one of us. We shall miss his modest grin. We wish Henk's family strength in facing their loss.

*Henk's colleagues at the
Leeuwenborch*

In memoriam

Daniel Omari Debrah



It is with great sorrow that we announce the demise of Daniel Omari, a first-year Environmental Sciences student from Ghana. This sad loss came on Thursday morning, 25 April 2019, following a short illness. Daniel passed away while in Ghana under the care of his family. Daniel graduated from Kwame Nkrumah University of Science and Technology, where he obtained his BSc

in Environmental Sciences and Management with First-class Honours. He was excited to be awarded an OKP fellowship, through which he could go on to take the Master's in Environmental Sciences at Wageningen University. Daniel was a modest student who worked hard and got good marks. He managed to finish all his courses in time. In March, however, Daniel was diagnosed with cancer. From that moment on, Daniel had only two wishes: to be united with his family and not to lose his fellowship, for he was determined to continue his studies

after his recovery: 'My wish was to see my family again as a graduate but this sad event has changed what I dreamt of.' Our sympathy goes out to Daniel's parents, sisters, family and friends, for their terrible loss.

*On behalf of students and staff of
the Environment and Climate programme,
the Dean's Office, the Ghanaian Community at WUR,
and the United Community of African Students,
Rudi Roijackers (study adviser) and
Marc Uijland (student dean)*

>>TYPICAL DUTCH



Born on a bike

I knew how to ride a bike before moving to the Netherlands. But it is clear to me now that I had not had the full 100% cycling experience before I came here. So now I try to learn from the Dutch, who act as if they were born on a bike.

In the rain, in the snow, after snow when it is slippery, at 6am to go to work, at 6am when going home tipsy. The cycling capabilities of the Dutch are just unbelievable. With two full bags from the supermarket, and one from the flower shop, carrying the youngest child in front and the oldest behind, or carrying a friend on the back of the bike; they can bike under any circumstances. Calling or texting, drinking or snacking – there are no barriers for them. I was surprised to see this, and my family and friends have the same experience when they come to visit me. I also enjoy (in retrospect) sharing with them all the crazy falls I have had due to my bike tyre getting stuck in a tramline, and my bike crashes because I didn't indicate with my hand that I would turn left. Let's say it's a learning process. And I am improving. I can even bike 'without hands' now! 🇬🇷 **Irini Pegiou, a PhD candidate at Plant Physiology, from Greece**

The cycling capabilities of the Dutch are just unbelievable

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 and earn twenty-five euros and Dutch candy.