

Food reactor

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RESOURCE [EN]

For everyone at Wageningen University & Research

no 9 – 8 December 2016 – 11th Volume

In search of new business models

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**INTERNATIONAL
EDITION**



>> MARIEKE + HOOP DANCE

Marieke Mantje, trainer at Education and Competence Studies



'Being yourself in your own little circle'

Hulahooping as a dance form. Marieke Mantje is a devotee. 'Lovely way of being in your body,' she calls it. 'Strengthening the balance between belly, heart and head. It's not a workout but afterwards you do feel stronger and more supple at the same time.' She makes the hoops herself and teaches hoop dance. Because it's even more fun in a group. She can be found on Facebook under lahoopnijmegen.

📷 RK / Photo: Guy Ackermans

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CLEAN HANDS

The complete dossier on the controversial Wageningen bottle deposit study contains 700 pages of documents and email exchanges between researchers, clients and politicians. It is not public so we at *Resource* will have to make do with statements from the Wageningen and the national integrity committees and an Amsterdam judge, all of whom have scrutinized the case. From their statements a reasonably clear picture emerges of the key players and main events. It boils down to this: a client leaks a draft report to government in the hope of forcing the decision they want. The researcher's boss promises to deliver a corrected version of the draft very soon. The researcher refuses to rush things but ends up doing so under pressure from the boss. A company that makes its living from deposit money sees which way the wind is blowing and starts a defamatory campaign against the study. A national newspaper takes sides in the conflict. Through all the wheeling and dealing, it looks as though researcher Ulphard Thoden van Velzen was the only one to keep his hands clean.

Albert Sikkema



>> [A tour of 2016 in 20 questions | p.16](#)

SCRUPULOUS BOTTLE DEPOSIT RESEARCHER WAS PRESSURIZED

- No doubts about impartiality or integrity
- Boss put pressure on researcher

The national academic integrity organ (LOWI) has published its report on the Wageningen bottle deposit study. The report elaborates on the verdict issued by the LOWI two weeks ago, that the researchers who were involved acted correctly and impartially. There are other interesting revelations in the report as well.

The LOWI report reveals, for instance, that in 2012 researcher Ulphard Thoden van Velzen refused to rush through improvements to report that had been leaked in draft form to the secretary of state for the environment. But his boss and clients put so much pressure on him that he produced the new version

after all. The resulting report contained errors, just like the draft. And once again, the clients and financiers of the study were not named. That was slapdash, says the LOWI. Thoden van Velzen should have turned down the assignment, in the LOWI's view, and distanced himself more clearly from the leaked draft. He later corrected the errors in the third and final version of the report.

The chief criticism of the plaintiffs in this integrity lawsuit is that the two researchers involved were required to provide evidence for the standpoint of the client – 'deposit money is the worst way of recycling plastic bottles' – so the conclusions had been fixed in advance. That criticism is unfounded, notes the LOWI. The WUR reports went no further than describing the deposit money system and were not written with the aim of supporting the views of the clients, states the

LOWI. Nor does the organ see any signs of actual influence of the clients on the contents of the report or the actions of the researchers.

The LOWI first assessed the report of the Wageningen committee on academic integrity (CWI), and established that the CWI conducted an 'impartial and extensive investigation'. After that the LOWI offered critics who had appealed to the national body the chance to shoot down the CWI investigation. Two of the three parties withdrew their complaints, while the third cited passages from presentations and emails by the researchers and clients. The LOWI's verdict is that those passages are full of implications but do not provide support for the claim of irregular and prejudiced research procedures.

The latest allegation by the plaintiffs is that Thoden van Velzen actively sought press coverage for the view that deposit money was

not a good system. They refer to a double interview in *Trouw* newspaper in 2012, in which Thoden van Velzen is presented as an opponent of deposit money. But the researcher had objected to this after seeing the draft version of the article. He wanted to contribute research-based information and not take a position, shows an email exchange between *Trouw* and the researcher. That did not stop *Trouw* from presenting him as an opponent of the system. The LOWI says he cannot be accused of partiality. **AS**

A link to the LOWI verdict can be found in this article on resource-online.nl.

COLD SHOWER

The new home of the Agrotechnology & Food Science group was officially opened on Monday 28 November with water and music. And actor from the theatre company Waterlanders played the trumpet in front of Helix, and Tijs Breukink of the executive board and operations director Annemieke Beers of AFSG played the bicycle pump. The baptism was complete when the musical Waterlander got a cold shower from the roof of the building. The agrotechnologists and food scientists moved to the campus from the Dreijen in June. That was over a year later than planned due to problems with the ventilation system in Helix. **AS**



PHOTO: GUY ACKERMANS

TIME BUT NO MONEY FOR WORLD FOOD CENTER

- Food Expo centre to go up near new station in Ede
- 'Nice opportunity for dialogue with the public'

Wageningen University & Research will take part actively in the World Food Center in Ede but will not be investing in it, says Raoul Bino, who represents WUR in the food experience centre.

'The World Food Center offers us a nice opportunity to

conduct a dialogue about food with the general public, given that the centre is expected to attract 200 to 300 visitors a year,' says Bino. 'We want to do research in the centre too, by involving the visitors in the use of health gadgets, food preparation and food concepts. We are developing research projects jointly with the universities of Maastricht, Nijmegen, Groningen and Utrecht.'

The food expo centre is to go up near the new Ede-

Wageningen station, construction of which starts at the end of 2018. The initiators are the World Food Centers foundations, Ede municipality, WUR and two project developers, Green Real Estate and Van Wijnen group. Future visitors should be able to smell, feel and taste foods in the centre. Companies such as Albert Heijn, DSM, Albron and Scelta Mushrooms will be taking part too. The main financiers are the provinces of Gelderland and Ede municipality. **AS**

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Tiring day

I stare glumly at my computer screen. I turn my head. In the distance I see a tall poplar against a clear blue sky. I already know it's going to be that kind of day. I knew it from the moment I entered the building. I worked half the weekend and I'm mentally tired now.

All I really want to do is to go home. And there's nothing stopping me, actually. But I don't, because I've only got six months to go and I've still got to..., I've still got to... Hmm, yes, what shall I do now actually?

I open Word. On some days I can write pretty well. This isn't one of those days.

I open R. On some days I'm quite good at stats. This isn't one of those days either. Maybe I could help my student. She often needs help. Sigh. Not today.

OK then, let me record my activities in Pure, a programme that keeps track of researchers' productivity. I always do this on these kinds of days. The higher my productivity is on Pure, the less I am doing. The system is unnecessarily complicated, so I'm busy for a while. But then I'm done. What now?

I'm just not up to any real work today. Not a problem in itself. I'm not a baker who needs to sell bread rolls right now. Nor a prison warder who must guard prisoners right now. I'm a PhD student. The only thing I've really got to do is write a book in the space of four years. What's more I've still got 195 hours of holiday left this year.

That's not how it feels. I would feel guilty if I went for a walk now and enjoyed the sunshine. So I work on and that is hard going at the moment.

Let's hope tomorrow's better. Not much chance though: it was a tiring day today. **B**



in brief

>> SINTERKLAAS

On the hometrainer

The favourite saint of the Dutch paid a visit to Wageningen University & Research last Monday morning. About 150 staff gathered in Atlas to welcome him. Sinterklaas was invited by De Binding staff association. He got onto a home-trainer and handed out vitality awards, assisted by a multi-coloured Piet. The idea of this prize is to draw attention to the importance of exercise and relaxation at work. The prize went to Linda van Os, coordinator at the Education desk. 'Linda walks the dog every day, maybe three times. That is very healthy,' said Sinterklaas. **MF**



PHOTO: MARIN FLIPSE

>> INTERNATIONAL STUDENTS

One quarter stay on

More foreign students stay on in the Netherlands than was assumed, says the Nuffic, the organization for internationalization in education. Five years after graduating, 36 to 40 percent of international students are still living in the Netherlands, and 25 percent of them stay here for the rest of their lives. Relatively few of the international students at WUR remain in the Netherlands. Of graduates in the field of agriculture and nature, 24 percent are still in the country five years later. For graduates in health-related and technical fields, that figure is 54 and 49 percent respectively. **AS**

>> PLANT RESEARCH

Study on bread

A lot of people claim to feel better if they avoid bread and other products containing gluten. Wageningen Plant Research is participating in a large-scale study that aims to get clarity on how realistic this claim is. 'The strange thing is that the people who say this are nearly all well-educated women of between the ages of 25 and 55,' says Luud Gilissen of Plant Research. In collaboration with the University of Maastricht, the Wageningen institute is going to study the link between various substances in bread and particular health problems. The research on constituents in bread will take place in Wageningen, while an intervention study will be set up in Maastricht to compare 90 irritable bowel syndrome patients with healthy volunteers. **AJ**

Stijn van Gils (29) is doing doctoral research on ecosystem services in agriculture. Every month he describes his struggles with the scientific system.



MAJOR STUDY ON ADHD DIET

- Researchers plan to work out how RED works
- Aim: a test which shows whether a child would benefit from the diet

The symptoms of ADHD in children can be reduced drastically by five weeks on a strict diet. In collaboration with the ADHD Research Centre in Eindhoven and Rotterdam-based paediatrician Rob Pereira, Wageningen researchers are going to find out why that is.

The researchers are going to measure the effects of a very frugal

diet on a wide range of blood and urine values, the composition of the gut flora, the immune system and the brain activity of children with ADHD.

The restricted elimination diet (RED) is put together for each child individually but always includes rice, lamb, turkey, vegetables and fruit, supplemented with vitamins and minerals. In the INCA study, published in *The Lancet* in 2011, the behaviour of around 60 per cent of the participating children improved radically on this diet.

In the new study, which will take six years, the scientists are going to investigate the differences

between children who do benefit from the elimination diet and those who do not. Firstly, blood, urine and faeces samples from 60 or so children on the diet will be analysed, and MRI scans will be made. A larger study will follow, based on the results of the smaller study.

The Wageningen researchers involved, who work in the Host-microbe interactomics and the Quantitative veterinary epidemiology chair groups, will focus on changes in the gut flora, the metabolism and the immune system response. 'It is a very legitimate assumption that gut bacteria play a role,' says

researcher Peter van Baarlen.

'Gut bacteria can make sulphur compounds from food, for instance, which are released into the blood and can reach the brain. We are going to see whether certain bacteria are present, or indeed absent, in the children who respond well to this diet.' The Wageningen researchers will also measure differences in gene expression.

Van Baarlen hopes the research results will lead to a test with which it can be established quickly and easily whether a child with ADHD stands to benefit from a diet, and which foodstuffs the child should avoid. **Ⓜ AJ**

THE SOWER GAINS A NEW DIMENSION

- Art project is part of centenary celebrations
- Alumni from 1967 have planted 10,000 bulbs

A trail of colourful flowers and special grass are going to add an extra dimension to the Sower statue at the entrance to the campus. The art project is part of the centennial of Wageningen University & Research in 2018.

The Sower, once a gift from the people of Wageningen, reminds us of the roots of Wageningen research and education: agriculture. But the Sower is more than that, says sculptor Jan van IJzendoorn of the Ruimte Denken foundation. 'The Sower is a metaphor for the dissemination of knowledge.'

Generations of Wageningen students and researchers have grown up with the statue, but the Sower looks a bit forlorn now on its plinth near Atlas, thinks Van IJzendoorn. The *Zaaisporen* (seed trail) project is intended to give the Sower his central place on campus back. Not literally – the statue will remain where it is – but figuratively. Van



PHOTO: SVEN MENSCHER

IJzendoorn and Peter Kurstjens of Ruimte Denken came up with the idea of seed trails of flowers and grass spreading out all over the campus from the statue.

The trails will be sown with flower bulbs and the blue-green grass Timotee. A team of alumni from the

class of 1967 have planted about 10,000 bulbs in the past few weeks. Snowdrops, summer snowflakes, crocuses and fritillary will be added next spring. The current stage is a pilot. If it works, the trails will be laid all around the campus next year, says Van IJzendoorn. Exactly

in time to be in full bloom during the centenary celebrations of 2018.

Ⓜ RK

Watch the video
Op resource-online.nl.

WATCHING 'LITTLE JAN' AT THE DRAUGHTS WORLD CHAMPIONSHIP

The draughts World Championship arrived in Wageningen on Wednesday 7 December. Three WUR staff will certainly be among the audience in the next few days. Because their club mate Jan Groenendijk (18) stands a chance of becoming the youngest draughts world champion ever.

Simon Oosting, assistant professor at Animal Production Systems, saw Jan Groenendijk graduate as a little boy from school draughts to the WSDV draughts club on the Grintweg in Wageningen. People used to call him 'little Jan'. 'But by the time he was eight or ten years old, he was already better than me,' says Oosting, who is in the top division himself.

Assistant professor Jozef Linssen of Food Quality and Design remembers Groenendijk joining the draughts club too. 'Children can take a free course of ten lessons. Jan came back a week later saying, "I've finished the

book". Which takes other children two and a half months. Then he was given another course of 20 to 40 lessons. Two weeks later he was back again.'

Oosting and Linssen kept track of the first few days of the World Championship via the livestream on wereldtiteldammen.nl. But when Groenendijk and his opponent Roel Boostra play three World Championship matches at Wageningen town hall on Thursday, Friday and Saturday, they will definitely take some time off to go and watch. Fellow club member Cor Langeveld, education coordinator at the Centre for crop systems analysis, will drop in too. 'It has never happened before that two Dutch players compete for the world title, and I saw Jan coming up the ranks. He really is exceptionally talented. He always pulls out all the stops and as a draughts player he goes to the edge. It's wonderful to see his levelheadedness, passion and dedication.'  YdH



PHOTO: SIMON OOSTING

Jan Groenendijk earlier this year in a simultaneous match against 20 fellow members of the Wageningen draughts club WSDV.



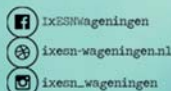
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MODEL EXPLAINS HUNTERS' BEHAVIOUR

- The earlier in the season, the more selective
- Red deer stand more chance of survival at the weekend

Hunters don't just shoot at anything that appears in their sights; they are constantly making choices. That is because hunting is strictly regulated and because they have their own preferences. A red deer stag is more likely to be targeted than a female with young.

According to Wageningen economist Andries Richter of Environmental Economics and Natural Resources, hunters' behaviour has not been studied much. He and his Norwegian colleagues developed a model that explains this behaviour. The model approaches the choices a hunter makes when he has an animal in his sights as an 'optimal stop problem'. Richter: 'Every time, the hunter compares the advantages of shooting now with the advantages of waiting for the next animal.' Richter



Hunters prefer to shoot male rather than female deer.

compared it with house-hunting. 'Do I buy this house or do I wait in case an even nicer house comes along?' The hunter's expectations can be modelled with three simple, measurable variables, says

Richter: the number of animals passing by, the amount of time the hunter has left in the hunting season, and the size of the group that is out hunting.

It is important to gain a good

understanding of hunters' behaviour, says Richter, because it can have a big influence on the ecology of animals. In Europe, for example, about 80 to 90 percent of red deer die at the hands of hunters. Red deer seldom live to be very old, therefore. Half of all the males do not survive their first couple of years.

To test the model, the researchers are using a huge database of 256 hunting locations in Norway, built up over more than ten years. The data records almost 182,000 decisions made by hunters, the deer they shot and the deer they let go. The model takes into consideration the influence of the weather, the day of the week, and the position of the moon. The model seems to reflect the actual results of the hunting accurately.

Hunters are least selective towards the end of the hunting season, when they hunt together, and when there are fewer animals in the area. They also shoot more readily on weekdays and by full moon. **R RK**

PRODUCING FOOD WITHOUT LIGHT

- Plants grow on electricity
- Closed system can produce food anywhere

David Strik, assistant professor in the Environmental Technology department, has received a grant from STW for work on a new way of producing food. He wants to produce food on electricity without the aid of sunlight.

On 24 November, Strik received an Open Mind grant of 50,000 euros from research funding body STW. This grant is awarded in recognition of innovative ideas in science. Strik is one of the brains behind Plant-e, the Wageningen spinoff which generates electricity from plant roots. Now he wants to develop a process that converts that electricity into food.

A plant normally thrives on sunlight, but the first step in photosynthesis in plants – the conversion of sunlight into sugars – is inefficient,

says Strik. Within his group PhD and postdoc researchers are already researching a system in which bacteria produce chemicals using electricity. Now he wants to find out whether plants too can grow on electricity, in a closed bioreactor. Ultimately this biological electrochemical system should efficiently convert water, nutrients and CO₂ into biomass.

Strik: 'So we skip the first step, photosynthesis. Production in a closed system, in the dark, has the advantage that you can do it 24/7.' A system like this could be taken into space, Strik confirms. 'According to our calculations, three people should be able to live off a food reactor the size of a fridge.'

Strik is doing the research together with Mathijs van der

Zwart, a Master's student of Biotechnology who conducted a pilot producing algae with electricity for his thesis.' **R AS**



LOW LEVEL OF INNOVATION IN AGRICULTURE



- One percent of farmers and market gardeners are innovators
- New products being developed in horticulture in particular

Only 1 percent of farmers and market gardeners are at the forefront of investments in new products or processes, according to the Innovation Monitor produced by Wageningen Economic Research (formerly LEI). The institute surveyed 1000 farmers and market gardeners in its business information network.

The horticulture sector had a relatively high proportion of innovators, at nearly 5 percent of market gardeners. Innovators invest for example in new varieties of cut flowers and pot plants, new processing lines for flowers and vegetables and new techniques for heating and cooling greenhouses.

There are hardly any early investors in innovation in agriculture. But there *are* early adopters. This group is dominated by arable farming (18 percent), followed by greenhouse horticulture (9 percent) and dairy farming (7 percent). Arable farmers, who have done well in recent years, are mainly investing in solar panels and precision agriculture. Dairy farmers are taking steps to cope with the end of milk quotas by building new barns in which feed supplies and milking are automated. In-

novation is relatively uncommon among pig farmers and poultry farmers. Pig farmers in particular have had some difficult years and have therefore been unable to make investments.

Another difference between agriculture and horticulture is that market gardeners develop new products whereas farmers hardly do this at all. An occasional poultry farmer will invest in an innovative animal-friendly barn and market the eggs under a brand name. The frontrunners do invest in innovation in the production process, such as GPS-controlled equipment, camera-controlled sorting machines and more energy-efficient equipment.

The share of early and late adopters is increasing, notes Ruud van der Meer, a researcher at Wageningen Economic Research, but the number of genuine innovators in agriculture and horticulture is not growing. That has been around 2 percent for years and was 1.1 percent in 2014.

If they could do whatever they wanted, arable farmers would mainly invest in ways to save on input costs and new crop protection methods. Market gardeners want to develop new healthy products while livestock farmers are interested in investing in animal health through the reduced use of antibiotics, better barns and vaccines for animal diseases. They are held back primarily by a lack of money and complex regulations, say the researchers. **AS**

WHICH WAS THE PRETTIEST THESIS OF 2016?

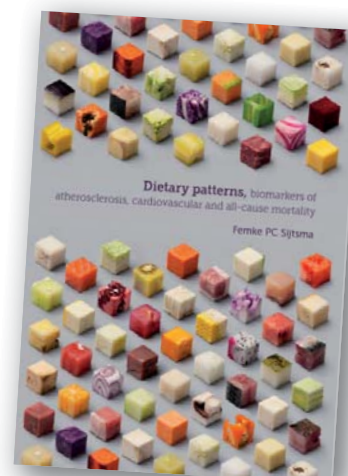
Voting starts next weekend on the Cover Prize 2016. This poll on the best thesis cover of the year takes place on resource-online.nl.

There are ten covers competing for the prize, selected by public relations officer Jac Niessen of Corporate Communication and science journalist Roelof Kleis from Resource. They selected the ten covers from a total of 296 theses which were – or will be – defended during this calendar year. This is just short of a new record. Last year for the first time there were over 300 theses.

Forty percent of the PhD graduates in 2016 were Dutch, the rest were international. The 35 Chinese who defended their theses formed the biggest group of foreign PhD graduates. This year 168 women and 128 men received PhDs so 57 percent of the graduates were women. Last year the proportions were more or less equal. We cannot conclude anything from that though, says Pim van Hengel of PhD Services: 'It changes all the time – one year more men, the next year more women.'

The thesis covers are selected by the jury for their creativity, their clarity about the content of the thesis, the production, colour and choice of font, and the general impression they make. Visitors to the Resource website decide the final winner with their votes. Voting closes in the evening of Sunday 8 January. The winner will be announced online and in the first number of 2017.

Last year nutrition scientist Femke Sijtsma won the cover prize with 39 percent of the votes. Sijtsma studied the relation between eating habits and cardiovascular disease and illustrated this with a design by artist duo Lenart & Sander: a colourful pattern of dice made of unprocessed foods. Sijtsma has been working at the VU medical centre in Amsterdam since April. **RK**



Last year's winning cover.

EVEN DEAD AKKERMANSIA KEEPS MICE SLIM

- Pasteurized bacterium protects mice against obesity and diabetes
- Practical advantages for use in food

The intestinal bacterium *Akkermansia muciniphila* inhibits the development of obesity and diabetes in mice even in pasteurized form. This makes it easier to use the bacterium in food, reports an international research team led by professor of Microbiology Willem de Vos in *Nature Medicine*.

De Vos and his team had previously studied the effect of sterilization on the way gut bacteria function. But sterilized *Akkermansia* bacteria proved not to offer any protection against obesity and diabetes. 'That is why I wondered what the effect of pasteurization would be,' says De Vos. This is a milder heating technique in which



PHOTO: BRAM BELLONI

bacteria are killed but certain proteins stay intact.

Remarkably enough, the *Akkermansia* cells that had been killed by pasteurization still caused mice on a fatty diet to gain weight at a slower rate and to remain sensitive to insulin. The dead cells worked just as well as live ones, in fact. And that came as a pleasant surprise to the researchers. 'Because

that means you can get this production on the market quite quickly,' says De Vos. The bacterium culture has already been preserved and the legal licensing procedures are a lot more straightforward than they are for live cells. It is also easier to handle and package pasteurized *Akkermansia* cells than the extremely oxygen-sensitive live bacteria.

The quest for an explanation for the effect of the dead bacteria led the researchers to a protein on the outer membrane of *Akkermansia*: Amuc_1100. Ingesting this also caused mice on a fatty diet to stay slimmer. The 1100 protein is unique to *Akkermansia* and takes care of the communication with the human gut cells, says De Vos. While he thinks *Akkermansia* could be used in nutritional supplements such as diet drinks, he sees the 1100 protein as a potential medicine. 'It could speed up existing treatments, for instance, for people with inflammatory bowel diseases such as Crohn's disease or irritable bowel syndrome.'

Together with Wageningen University and the Université Catholique de Louvain-la-Neuve, De Vos has started the spinoff A-mansia Biotech, with a view to upscaling the production of *Akkermansia* and the membrane protein. **® AJ**

LARGE TREES GROW MORE SLOWLY THAN WAS THOUGHT

- Tropical giants' growth slows down once they become big
- Important for estimates of carbon sequestration

Carbon capture volumes are fairly well known for ordinary trees. Mathematical formulas describe the relationship between tree size and biomass growth. Forest ecologists can use this to get a reasonable estimate of the contribution that trees and forests make to the carbon balance, which is important for climate change. But this is trickier for large trees, as Pieter Zuidema and international colleagues explained in *Functional Ecology* in November.

The group used annual rings to track the growth history of more than 700 large tropical trees in Thailand, Cameroon and Bolivia from a database containing 1400 trees and 14 different species. The life histories show that the biomass growth of individual large trees levels off. Zuidema and colleagues are therefore

disputing the conclusions of a *Nature* article in 2014 that argued that the biomass growth of trees continues to increase up to the end. But that was a population-level study. Zuidema: 'You can't draw conclusions about individual trees based on observations of a population as a whole. If the largest trees in the forest grow fastest, that still doesn't mean that trees grow at a faster rate towards the end of their life.'

The study by Zuidema originated in the fortnightly meetings in which researchers in the Forest Ecology & Management chair group discuss a recent scientific paper. This *Nature* article not only raised questions, the researchers also realized that they were able to answer those questions with their own data.

According to Zuidema, the findings do not suddenly mean forests are storing less carbon. 'But we do need to be incredibly careful with assertions about the growth of large trees and the contribution that makes to carbon sequestration in forests, and we need to carry out more measurements of large trees.' **® RK**



FOTO: PETER GROENENDIJK

Biomass growth on tropical giants eventually plateaus out.

Resource reports online every day on life and work at Wageningen University & Research. You can read the interviews with a Nethervanilla farmer, and with the scientist doing the most disgusting experiment in Wageningen. All on resource-online.nl

MEANWHILE ON...



RESOURCE-ONLINE.NL

NETHERVANILLA

Researcher Filip van Noort of the Greenhouse Horticulture department at Wageningen Plant Research has been growing vanilla in Bleiswijk for over four years. It should become clear next year whether it is profitable to grow this natural flavouring in the Netherlands. Sticks of vanilla are very pricy because cultivating the orchid species which produces vanilla is complex. What is more, 80 percent of all the natural vanilla comes from just one source: the African island of Madagascar. Crop specialist Van Noort received cuttings of the vanilla orchid from Uganda and grew them in a WUR research greenhouse in Bleiswijk.

HERBARIUM

Herbarium Vadense has got its first stone back again. It was laid in 1984 by Professor H.C.D. de Wit, the founder of African plant studies in Wageningen. Last year the former university herbarium was transformed into a 41-room student housing complex. The design is such that the student rooms could always be combined to form larger apartments at some later date. The white-brick outer walls of the building got a complete makeover. At the official opening of the complex on Wednesday 23 November, councillor Han ter Maat unveiled De Wit's original stone, which has been polished up and now stands in pride of place beside the main entrance.

DISGUSTING

Master's student Elke Wenting may well be doing the most disgusting experiment in Wageningen. She is studying the competition between maggots and bacteria on rotting meat. And that is such revolting work that no one really wants an experiment like this anywhere



PHOTO: ROELOF KLEIS

near them. So Wenting has her 'experimental station' in a black plastic tent in a field on the Bornsesteeg. At a safe distance from the campus. Wenting inspects the progress of the experiment a couple of times a week, in a white protective suit and a mask. 'We don't know whether the substances that are released are dangerous. Hence the mask and suit.' And then of course there is the smell of rotting minced meat. Wenting monitors the disintegration process carefully, measuring every week how much has been digested and where the nutrients have gone. Have the maggots had a share, and if so, how much? From that information it can be deduced who won the competition for the meat.

BUMBALL

Students of Geo-Information Science have emerged as the winners of the Battle of the Studies. The competition was organized by student sports association Thymos, and students could enter various games, such as bumball, in teams. Sixteen fanatical teams from various different degree programmes joined in. The theme – Crime Scene Investigation – was reflected in participants' garb. The Biology team, in white suits and mouth caps, won the prize for the best outfit. Bumball was extremely popular. In this game players have to catch a ball with their chest or backside with the help of a vest with velcro on it.

**Watch the video
on resource-online.nl.**



Wageningen Research seeks new future



Wageningen contract research is in crisis. Trusty old clients have fallen by the wayside and new business models are needed. A working group led by Raoul Bino is pondering the options. The first successful examples are being seen.

text Albert Sikkema illustration Geert-Jan Bruins

Wageningen Research is facing heavy weather. Raoul Bino, Director of the Agrotechnology and Food Sciences group, makes no bones about it. The number of government research assignments has dropped by tens of percent, the competition from other Dutch and European institutes and universities has increased, and the rules for research funding have become more complicated. The research institutes' turnover and results are falling. 'And our freedom to formulate research projects ourselves is declining too,' says Bino. 'We are eating into our intellectual capital.'

In an effort to reverse that trend, a working group led by Bino is thinking through a new strategy. 'We need to get

the time and space back to invest in knowledge development ourselves again,' says Bino. And that can only be achieved if the organization changes. 'We should no longer look only to our clients and network for research projects, and we should start thinking in broader terms as Wageningen Research. The thing is to try to build up strategic collaboration with businesses, ministries and provinces, to discuss your vision and plans together, to make sure you understand each other's expertise and issues, and – where necessary – to bring other parties on board to address the issues. Don't be defensive about your knowledge, put your cards on the table. This is not about just one project but about how we can collaborate for the next five years.'

New business model 1

Regional station

Shellfish research at Wageningen Marine Research in Yerseke in Zeeland very nearly bit the dust, but at the eleventh hour in the spring of 2016 the possibility came up for funding a slimmed-down version of the programme. The new *Regiostation* for the shellfish sector was born.

The Zeeland shellfish sector and regional government have allocated around half a million euros per year to the station for the next five years, and have made deals with Marine Research about a completely new organizational structure and management. In the past, researchers and clients negotiated the research projects, after which the researchers carried them out at an hourly rate and sent in their bill. Now there is a pot of money and researchers and clients discuss how to spend it in working groups. Marine Research has also set up a helpdesk for the shellfish sector, where fishers and fish farmers can bring their questions, free of charge and without a project necessarily coming out of it. Nor do researchers and fishers charge each other any more for joining trips on each other's boats.

'It is a new way of working together,' says researcher Aad Smaal of Marine Research. He is posi-

tive about it. 'It gives everyone some peace of mind because there is more security for the researchers and the clients can directly see what happens with their money.'





NEW MIX

Wageningen Research has three kinds of clients, Bino explains. ‘There is government, particularly the ministry of Economic Affairs. Then there are the public-private projects such as the EU ones. And thirdly, there is industry. All together this should be able to generate a healthy turnover, with which the institutes can maintain their knowledge base.’ But this does require new business models, because the knowledge base funding from Economic Affairs has been cut back over the past few years, and the product boards, with their joint research agendas and budgets, have been closed down. So new forms of collaboration need to be established, with new partners and new rules of play. The first successful examples can already be seen (see boxes).


Wageningen Food & Biobased Research, the institute Bino heads, is managing quite well to get positive results with a new mix of research assignments. The institute is even in a position to invest in a new facility for post-harvest research. Bino: ‘The shelf life of fruit post-harvest is an important issue, and we expect a growing number of research assignments. We have made a business plan and as a management team, we have said: we have the confidence to invest in this. You would like that to be possible more often in Wageningen Research. You need that kind of freedom as a research organization.’

A UNITED FRONT

But will this be feasible for the Wageningen research in the field of nature and environment, which is currently running at a loss? Bino: ‘I think those researchers could develop new business with partners from industry too. Companies are investing in the circular economy and they want to deal with their environment sustainably. With a shared vision on the research context, and with sound project management in place, the environmental researchers can establish strategic collaboration with companies too.’

‘We mustn’t keep our networks to ourselves but help each other’

What helps when exploring the market, says Bino, is for business unit managers not just to call in on companies on their own behalf, but to present a united front. ‘We must be more strategic, and ask ourselves: which would be the best business unit to approach this client? We mustn’t keep our networks to ourselves, we must help each other.’

And what should we avoid doing? ‘We mustn’t try to undercut others with low rates and we mustn’t do anything we are not good at. Either you are the expert or you bring in an expert from another science group. You’ve got to think in a new way, from the market’s point of view.’ 

New business model 2

Club of 100

Wageningen Plant Research has started a 'club of 100': a collaborative network for suppliers in Dutch greenhouse horticulture. For a fee of 15,000 euros per year, members of the club get easy access to the Greenhouse Horticulture business unit's expertise. 'Half the fee gives them the right to commission short-term experiments or calculations from us, as well as exchange ideas about innovation and have strategic discussions,' says business unit manager Sjaak Bakker. The other half of the membership fee goes towards joint projects. 'It is accessible and they can ask any questions they like. There aren't any difficult contract negotiations. And if we don't know the answer ourselves we bring in a WUR specialist from another department.'

The club now has 65 members who bring in a million in research funding between them. They set the research agenda. This means getting the sometimes competing companies on the same page. Once that is the case, it is the researchers' job to work out the project with a supervisory group, and to

implement it for a fee agreed with the members, paid from the joint kitty. Bakker: 'The great advantage is that you make people part of your organization. You go for a long-term relationship.'

Bakker sees another promising business model too. 'Nowadays we do consultancy jobs for countries that want to develop high qual-

ity research facilities for greenhouse horticulture. That is lucrative because, besides our unique knowledge of the research in that field, we have the greenhouse facilities to go with it. So you sell that knowledge, and then you get a strong international research partner into the bargain. What is more, it gives you an incentive to stay at the top.'



New business model 3

Agro & Food Portal

Wageningen Economic Research provides economic information and research results on the online portal Agrimatie. This national database on the agriculture sector is usually maintained with funding from the ministry of Economic Affairs. Lower levels of government can also be interested in this data, however, insofar as they apply to their region. For example if the province of Brabant wants to know how fast the number of pig farms is going down, it can pay for information from the Agrimatie database. In this case the fee the province pays covers not just the researchers' time, says programme manager Arjen Daane, but also some of the technical costs and model development. The extra income enables Wageningen Economic Research to invest in new products.

Daane would also like to provide information from Agrimatie to businesses. If, for example, his institute does an exploratory study for the Organization for Economic Cooperation and Development (OECD) on projected developments in the European

dairy sector, this could generate strategic information that companies would be interested in buying. In such cases too, the institute should charge the company for part of the data and development costs, argues Daane, to create room for investment by the

institute. You could also look for a strategic partner in this. Economic Research has plans, for example, to collaborate with a bank or a consultancy firm, with the institute generating the knowledge and the partner disseminating it.



PHOTO: NASA

2016

Was it a duck that brought ornithologists flocking to the Wageningen campus from all over the Netherlands? And what has René van der Gijp got to do with our WE-pods? Yes, what exactly went on this year? Do the end-of-year quiz and let the whole year pass before your mind's eye. Twenty questions, eighty answers. In most cases, only one is right. If you can't figure it out, or you're just too lazy to look it up, the answers are on page 26.

1. 'I HAVE NEVER FELT SO WHITE BEFORE'. WHO SAID THIS?

- a. Student Els van Coeverden, à propos of her internship on the Dutch island of Sint Eustatius
- b. Cyclist Niels van der Pijl reacts spontaneously after winning in the Tour de Congo
- c. The Chimney Piet looks back on his performance for staff association De Binding
- d. Ex-rector Martin Kropff is happy to be back on familiar stamping grounds again

2. HOW THE RECEPTIONIST AT THE FORMER LEI IN THE HAGUE ANSWERS THE PHONE:

- a. Good morning, this is the reception at Wageningen Economic Research
- b. Good morning, this is the reception at LEI
- c. Good morning, this is the reception at Wageningen University & Research, the department of Economic Research
- d. Hi, Els speaking

3. AN UNUSUAL ANIMAL APPEARED IN THE GARDEN OF LUMEN. WHAT WAS IT?

- a. A golden jackal
- b. A meadow pipit
- c. A subalpine warbler
- d. A duck

4. CERES'S FAMOUS MINIBUS WEEK CAME TO A STICKY END AFTER JUST ONE DAY. WHY?

- a. A few drivers ran into a breathalyser test
- b. The buses turned out not to be insured
- c. The buses were sabotaged by members of KSV
- d. Some drunken participants walked on a motorway

5. CUTLERY DISAPPEARS FROM CANTEENS AT AN ALARMING RATE. KNIVES ARE THE EXCEPTION. WHY IS THAT?

- a. Students don't eat with knives and forks
- b. Knives are harder to steal
- c. Knives are cheaper than forks and spoons
- d. The reason is unknown

in 20 questions

(and 80 answers)

6. 'THE WORKING HOURS ARE WEIRD: FROM 09.30 TO 22.00 HOURS.' WHO?

- a. Fons Janssen, chair of the new student union SAW complaining to the rector about the evening lectures
- b. Student Raoul Frijns admires the industriousness in Korea
- c. Mortierstraat 14B has had enough of Wageningen
- d. Heineken prize winner Jennifer Doudna is amazed by the work ethic on campus

7. THE POPULAR TEACHER GOSSE SCHRAA HAS RETIRED. WHICH HOBBY WILL HE HAVE MORE TIME FOR NOW?

- a. Ballroom dancing
- b. Cricket
- c. His collection of dinky toys
- d. Fly-fishing

8. IN WHICH OLYMPIC SPORT WAS WAGENINGEN UNIVERSITY & RESEARCH NOT REPRESENTED THIS SUMMER?

- a. Athletics
- b. Horse-riding
- c. Track cycling
- d. Hockey

9. THE FIRST EVENING CLASS IN FORUM:

- a. Social dimensions of health and bodily care
- b. Food law
- c. Advanced statistics
- d. Advanced method in chemical research

10. THE EXECUTIVE BOARD SETS GREAT STORE BY GENDER POLICY. ITS TARGETS FOR 2020:

- a. 20 percent of directors are women
- b. 80 percent of professors are men
- c. 20 percent of PhD supervisors are women
- d. 80 percent of students are women

11. SPACE GARDENER WIEGER WAMELINK HAS HAD GREAT SUCCESS WITH HIS:

- a. Poppy seeds
- b. Thale cress
- c. Martian tomatoes
- d. Venus fly traps

12. WURBIE, ONE OF THE TWO SELF-DRIVING WEPODS, OWES ITS NAME TO:

- a. Johan Derksen
- b. René van der Gijp
- c. Hans Kraaij junior
- d. Wilfred Genee

13. 'ART AND SCIENCE SHOULD BE LIKE MINES, WHERE THE SOUND OF NEW WORK AND PROGRESS CAN BE HEARD FROM ALL SIDES.' WHO?

- a. Louise Fresco, when she unveiled the artwork Veritas existantiae in Orion
- b. Melanie Schultz van Haagen on the occasion of the first drive in the WEpod
- c. Gerard Jagers op Akkerhuis when unveiling the temporary artwork Scala Natura in front of the Forum
- d. Francis Bacon on the side of the Amphitheatre

14. THE EXECUTIVE BOARD IS CONSIDERING SWITCHING TO ENGLISH IN MORE BACHELOR'S PROGRAMME. WHY?

- a. The number of Dutch students is going down
- b. There are better textbooks in English
- c. It will improve the teachers' English considerably
- d. The university wants to boost its international image

15. MASTER'S STUDENT NUMBERS ARE STAGNATING. WHY IS THAT?

- a. More and more Bachelor's students are going elsewhere to do a Master's
- b. More and more Bachelor's students don't do a Master's at all
- c. Fewer and fewer Bachelor's students stay on for a Master's
- d. Fewer and fewer Bachelor's students complete their degrees

16. MANY PHD CANDIDATES DID NOT VOTE IN THE ELECTIONS FOR THE STUDENT COUNCIL. WHY NOT?

- a. They boycotted the elections because they did not think they were fair
- b. They didn't receive a call to vote
- c. They submitted their ballots too late
- d. They thought the call to vote was spam

17. COMING SECOND IS GOOD TOO. BUT WHO CAME FIRST?

- a. The iGem team with the varroakiller
- b. The WUR lawyers in the deposit money case against Trouw
- c. Professor Huub Savelkoul in the quack doctor prize
- d. Powerlifter Iris Brunsmann at the national championships

18. CORMET GOT THE LOWEST SCORE IN RESOURCE'S CANTEEN TEST. HOW DOES THE BOSS RON NAGETGAAL REACT?

- a. 'I actually prefer to eat with plastic cutlery'
- b. 'A 6.3? Well that's a pass, isn't it?'
- c. 'Our cook is a master fryer'
- d. 'We will certainly be addressing a number of points for attention'

19. WUR IS BIG IN MOSQUITO RESEARCH. WHICH DISCOVERY IS FALSE?

- a. Mosquitoes are mainly bothersome in bed
- b. Mosquitoes avoid odour traps
- c. Mosquitoes don't like the Axe affect
- d. Mosquitoes never bite twice in the same place

20. DIJKGRAAF FLAT PUB DE BUNKER HAD TO CLOSE TEMPORARILY IN FEBRUARY. WHY?

- a. The beer was finished
- b. A party announced on Facebook got out of hand
- c. There were not enough volunteers for bar duty
- d. The party drug GHB was found in the toilet

Lab on constant alert

The outbreak of avian flu in the Netherlands means extra work for the staff at Wageningen Bioveterinary Research. They are now running an emergency service analysing samples from dead and suspect animals in their high security lab.

text Yvonne de Hilster photos Koen van Weel and Bioveterinary Research

On Friday 18 November, Eefke Weesendorp, head of the department of diagnostics and emergency response at Wageningen Bioveterinary Research (the former CVI) and three of her colleagues were going through the results of routine tests on water birds. 'The results of most of the diagnostic tests were negative. But then I saw positive signs in one set: signs of avian flu.'

An hour later, once all the test results had been matched with the samples, it became clear that only wild birds were infected with avian flu type H5 (see box). The commercial poultry that was tested was not infected at this point, so emergency regulations did not have to come into effect. In the night of 25-26 November, however, things took a turn for the worse. Wessendorp's colleagues found an avian flu virus of the H5 strain in samples taken from a duck farm. That Saturday all the ducks on the farm in question were culled, along with the poultry on nearby farms. The latest outbreak of avian flu in the Netherlands had begun.

ALWAYS PREPARED

Wageningen Bioveterinary Research in Lelystad is always prepared for the outbreak of animal diseases, says Weesendorp. It is comparable with a fire brigade, hoping no fires will break out and nobody will need saving, but always prepared for the possibility. Equipment and supplies are kept in good order, people are trained and they all know what their task is.

'We provide a fast diagnosis so the government and the sector can take action fast'

'Our overall goal as an emergency organization is to provide a fast diagnosis so that the government and the livestock sector can take action fast to prevent diseases from spreading any further. Everything is geared to that.'

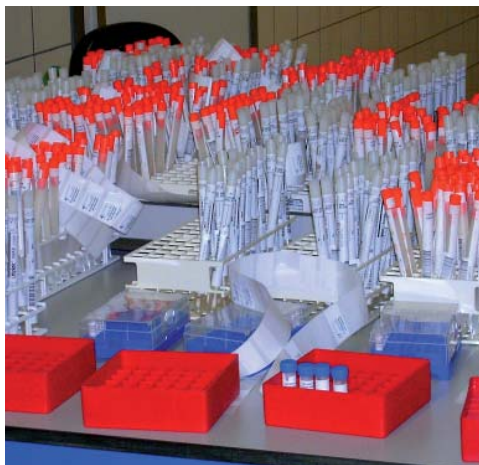
Three parties are involved in combatting animal diseases in the Netherlands: the ministry of Economic Affairs, the Dutch Food and

Consumer Product Safety Authority (NVWA) and Wageningen Bioveterinary Research (WBVR). They divide the work into four phases: normal, alert, crisis and completion. In 'peace-time', when there are no alerts for animal diseases, there are always six people on call at WBVR. 'Sometimes you get a report at night of something suspicious and then you are in the lab till 6 o'clock in the morning,' says Wessendorp. 'Even though your agenda for that day is full of appointments. But when you are on duty you know that can happen.' The protocol for dealing with emergencies is constantly updated during peaceful periods too.

SCALING UP

The alert phase starts when a notifiable disease breaks out in a neighbouring country or if the number of cases of the disease in wild animals goes up, posing an increasing threat to the commercial sector in the Netherlands. Emergency response project leader Eric de Kluijver goes through the procedures once again just to be on the safe side. He also alerts suppliers and extra staff, so they can be prepared for a crisis.

Eric de Kluijver and Eefke Weesendorp





'We have to be able to upscale at any moment. To make sure there are enough people at Wageningen Bioveterinary Research who can carry out the necessary tests in a crisis, we conduct training courses every year. Key figures are then trained in their role during a crisis. And everything is agreed, from the precise tests and the time they are expected to take, to the division of tasks among the members of the crisis team.'

The crisis phase starts when an outbreak is observed on a commercial farm – as happened on Saturday 26 November. WBVR then forms two emergency teams: an 'internal' team in the laboratory and an 'external' team which has contact with policymakers, researchers and epidemiologists. De Kluijver: 'If we have to test an awful lot of samples, we switch to a more automatized testing method.' If necessary colleagues from other departments of Wageningen University & Research can help out.


DYNAMIC

It is hard work in the period before the emergency teams are set up, but after that the emergency procedures run pretty normally, say Weesendorp and De Kluijver. It remains important to build in enough breaks, says De Kluijver. 'If you

start running the minute it gets busy, you keep on running. Whereas it stays busy, whether you run faster or not. If you don't take any breaks, you run the risk of making mistakes and running yourself into the ground.'

Weesendorp has clear memories of the 2014 outbreak of avian flu. 'It was very intensive then, but we came up with fantastic teamwork.' She enjoys her work in diagnostics more than her previous work in 'ordinary' research. 'It is

much more dynamic, no two days are the same. And the result is much more tangible too. Because you feel that you are really doing something for the Dutch livestock industry.'

Later, when the danger for livestock has abated and this bird flu crisis is over, Bioveterinary Research will go into the 'completion' phase. Evaluations and archiving take place and it is decided whether any additional research is needed into the history of this epidemic. 

IDENTIFYING H AND N STRAINS

Avian influenza, or bird flu, comes in various guises, known as H and N strains. The H and the N stand for surface proteins of the virus. There are 16 H strains and 9 N strains. Some of the viruses are highly pathogenic (extremely infectious) while others are low-pathogenic. The H5N8 now afflicting the Netherlands is highly infectious for wild birds and poultry.

Staff at Wageningen Bioveterinary Research (WBVR) continuously test wild birds and poultry for avian flu. They do this in laboratories that are sealed off from outsiders for safety reasons. Couriers bring the dead (wild) animals for analysis and tissue samples from living animals to the WBVR service desk in Lelystad. Their arrival is announced beforehand by the Dutch Food and Consumer Product Safety Authority (NVWA). Everything is packed and labelled to strict standards and every sample is put into the lab information system. In the lab the samples are studied for genetic material (RNA) from viruses. Tests for the presence of H5 or H7 (highly pathogenic avian flu viruses) take six hours. Identifying the N type takes at least another 36 hours.

Bioveterinary Research works for the ministry of Economic Affairs and is not allowed to say how many tests it is carrying out.

Guilty Christmas Pleasures

For some it's the worst time of year, while others can't get enough of the dark days before Christmas. Resource investigated the guilty christmas pleasures of the Wageningen student.

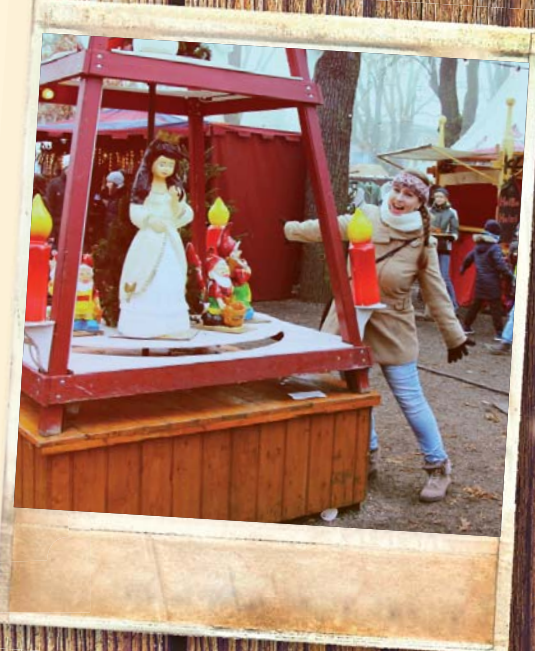
text Marijn Flipse *photos* Sven Menschel

Addicted to Christmas music

'I am addicted to Christmas music. It helps me study. I can concentrate better and I don't feel the urge to go outside. It makes it so cosy indoors. I have a favourite Christmas band, the Pentatonics. They sing a capella and their technique is very good. That is important to me when I listen to music. I start to feel Christmassy in September, just after the summer holiday. I also listen to Skyradio Christmas or to Christmas playlists on Spotify. Some people are a bit shocked when they hear about this and wonder if I'm not sick of Christmas music by November. But I just play a different playlist; I can't get enough of it. I'm doing an internship in Germany now, and the songs are in German. That's awful. Luckily there's a Christmas market around every corner, which makes up for it to a great extent.'

Linda van Garderen

Double Master's in Environmental sciences and Climate studies



Christmas tree, Christmas jumper and above all, pink baubles

'My sister and I start listening to Christmas music from September onwards and I have my Christmas tree up from October. I love Christmas, and I like wearing a Christmas jumper with Christmas leggings, and I have loads of Christmas socks. It is just the nicest time of year. You see your family, you eat nice food, there are lights everywhere, everything is beautifully decorated. This weekend I went to a garden centre and some furniture shops with my mother to get Christmas decorations. I love it. My tree is full of Christmas baubles I've been given. By my grandma, mother and aunt, for instance. Pink is my favourite colour, so most of the baubles are pink. I always play Christmas music while I study. I listen to anything, from playlists on Spotify to American or Scandinavian Christmas radio stations. Lovely.'

Cecile Geuijen
Bachelor's in Food Technology



Eva Wijntjes
Master's Food Technology

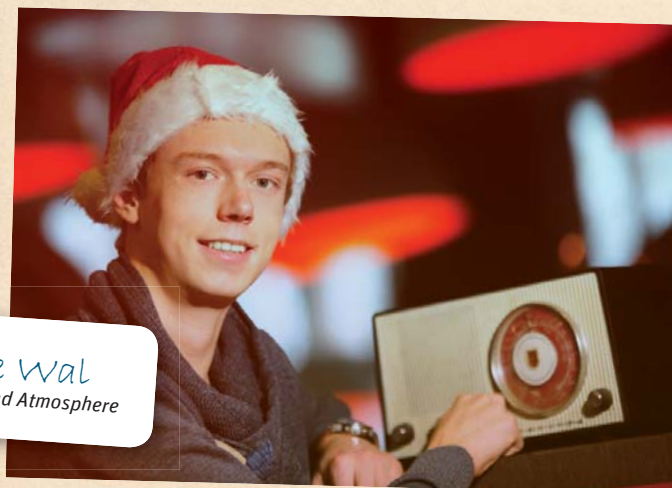
'Boerenkool with all the family'

'From before I was born my mother's side of the family have always eaten *boerenkool* (mashed potato with kale) with sausage on Boxing Day. And we still do. Someone tried to change this once but my 86-year-old grandma wouldn't hear of it. We eat *boerenkool* and nothing else. My grandma has five children and everyone organizes something: one person brings snacks for before the meal, someone else brings drinks and someone else the *boerenkool* and sausage. During the day we get together and play games. Early evening we all start peeling potatoes. It goes quite quickly because there are 30 of us. I've got quite a boisterous family so it's always jolly and noisy. Before we eat my grandma chooses a poem and reads it aloud. A tin is passed around the table and everyone puts some money in it for a charity. We all sit at a long table with two huge pans of *boerenkool* and sausage. A lot of my family wear something silly at Christmas. I sometimes wear a Christmas jumper but this year I'll be wearing a broche. It is a reindeer's head with flashing lights.'

Top 2000 16 hours a day

'I'm not very into Christmas but I am into the Top2000 on Radio 2. I think I listen to it about 16 hours a day. This music list is played between Christmas and New Year. The radio is on whenever possible. Otherwise I have earphones and I just listen on my mobile. The only time I don't listen is when I have obligations such as sport training. I never used to be interested. I began to take more interest in music in the fifth year at secondary school. In the break we sat at a computer with speakers and listened to the golden oldies. Now I'm addicted. You can vote on the list and I do that every year. The Top2000 café is open in Hilversum in the period between Christmas and New Year. You can go there to savour the atmosphere and see the DJs. I went two years ago and I think I'll go again this year. It's a question of picking the right moment, because it can be extremely packed. I think I'll go on Boxing Day around dinner time, when everyone's having Christmas dinner. What's my favourite number? Pink Floyd's 'Wish you were here'. The lyrics are good and the music is beautiful. I'd like them to be number one.'

Hylke van de Wal
Bachelor's in Soil, Water and Atmosphere



WHAT SHOULD THE NEW STUDENT UNION START BY DOING?

After five years without one, Wageningen has a student union once more. The Student Alliance Wageningen (SAW) was set up in response to student protest in May against evening classes. So what would Wageningen students like the union to do?

text Marijn Flipse and Annie Berendsen illustration Henk van Ruitenbeek

Yorick Vink



Master's in Urban Environmental Management

'Of course you can never be against a lobby organization. But I'm curious. When I heard about the student union, I thought at first it was all about the issue of evening classes. Beyond

that **I thought there would be a lot of overlap with the Student Council (SC). Now I know that the two coexist in other university towns too, so it's obviously possible.** I don't know much about it but I would imagine a union can be more militant. On the other hand, it might have a bit less muscle than an SC. I think the main thing is for the student union to make clear what its role is, and what distinguishes it from the SC.'

Maaïke van Slagmaat



Bachelor's in Molecular Life Sciences

'I'm glad there's a student union again. A lot of associations have joined it and it makes it possible to speak with one voice. Maybe then students will get listened to. **The new union should make sure no evening**

classes are introduced after the pilot. No students want them. I hear nothing but complaints about them. I'm a member of Argo myself, and ours is a team sport. We train in the evenings and if one of us has an evening class none of the team can train.'

Alyssa van der Linden



Bachelor's in Animal Sciences

'Well, so I didn't even know there was a new student union. **Maybe they should do more to make themselves known. Put up a nice stand somewhere, for example, and hand out sweets. Yes, sweets are sure to attract students, I**

think. A clear flyer with all the information would be helpful too. I do hope this union will keep going and not give up. On the issue of evening classes, they shouldn't stop until they achieve their goal. Last week there were problems with the train and there was only one bus going to Wageningen. There were an awful lot of students who had to get to the university. We even phoned the bus company Syntus but they didn't send any extra buses. A union has more clout if there are problems with public transport. Oh well, there are always issues they can take up. As long as they don't give up.'

Margreet Heida



Bachelor's in Animal Sciences

'I am pleased that there's a new student union. It is important to speak with one voice to the university. That way it is clear what students want. **At the moment the influence of the lobby groups we've got is minimal. They are**

too small. What they've got to do now is protest loud and clear to prevent evening classes from being brought in. And



they should make sure they are really visible. I do hope they will really represent student opinion and not just the views of the people behind the union. Another issue that's important to me is to be able to resit exams even if you didn't fail. You need certain grades, if you want to go abroad for instance. Sometimes your grade is not quite good enough. I think it's allowed at every university except Wageningen. Actually I also think it's important that students should be able to take their exams in Dutch, even if their programme is taught in English. There are plenty of things the union can stand up for.'

Tim den Duijf



Bachelor's Landscape Architecture and Spatial Planning

'I think it's a good idea to have a student union. I think the internal issues at the university are already dealt with by the Student Council, but it's the interests of students beyond the university that don't get enough attention. **There is plenty of room for improvement there. Take for instance the problem of the endless stream of cyclists at the traffic lights at 8.30 on a Mon-**

day morning. Or the gridlock with bikes and cars around the Jumbo. Perhaps they could even help students who don't belong to a student society with finding housing. I think a student union would work very well here. It might also help to shake students up a bit politically.'

Elske Zwart



Bachelor's in Nutrition and Health

'I'd say a student union can certainly contribute towards improving the academic environment. Take for instance the need for more work stations, workspace, and more accommodating opening times for university buildings. Why does the library only have 300 workstations for 10,000 students? It is definitely the place with the best atmosphere for working, much better than all those computer rooms. **I have a lot of extracurricular activities so I'd like to decide for myself when to study. I feel the university has a nine to five mentality.** After six o'clock there's nowhere you can go, whereas personally I can study far better in the evening or at weekends. The student union could fight for that.' ③

Trend: two Master's at same time

Why do one Master's when you could do two at the same time? Growing numbers of students are opting to do two Master's in order to increase their chances of a job — or simply because they can't choose.

text Teun Fiers photos Aart-Jan van de Glind

The number of students registered for two simultaneous Master's has been increasing steadily since 2012, according to figures from VSNU, the Dutch association of universities (see figure). This trend is also evident at Wageningen University & Research, says Henk Vegter of the Education Research & Innovation department. The proportion of Wageningen students doing two Master's concurrently has doubled in the past two years, from 1.1 to 2.3 percent.

CHANGE IN THE LEGISLATION

On the other hand, the number of students doing two Master's one after the other is decreasing. The rise in two simultaneous Master's seems to be in response to the change in the legislation in 2010. From that date, the Dutch government stopped giving universities funding for students who had already completed one Master's degree. As a result, universities started charging higher tuition fees for students who wanted to do a second Master's after their first Master's degree. These so-called 'institutional' fees can be as much as 20,000 euros, substantially more than the statutory fees of nearly 2000 euros that you pay if you do not yet have a Master's degree. So as of 2010, doing two Master's at the same time is considerably cheaper than doing them one after another.

AN EXTRA YEAR

Wageningen students doing two Master's simultaneously are allowed three years in which to complete their degrees. A maximum of 60 credits (ECTS) can be used to count towards

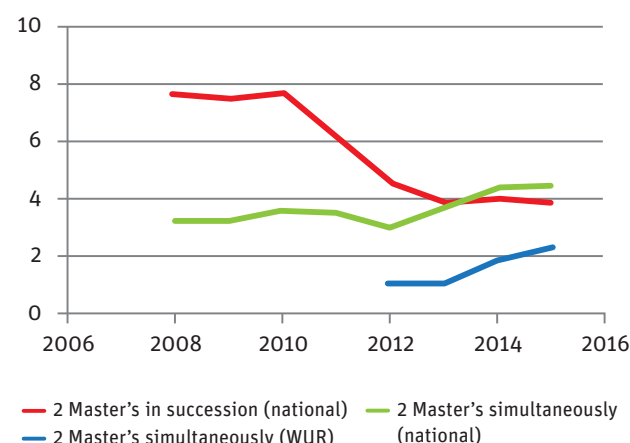
both Master's. The students do have to write a separate thesis for each degree.

Rolf van der Velden, a director of the Research Centre for Education and the Labour Market (ROA) and professor at Maastricht University, believes the double Master's option is appealing in particular for students who want to improve their chances in the job market. 'While this has yet to be researched, it seems logical to me that two Master's will be more common where the outlook in the job market is poor. Students sometimes opt for a Master's in a different area as a way of standing out from other students. In the past they would have achieved this by doing part of their degree abroad but now nearly everyone does that; it's no longer distinctive.'

COMPETITION

Incidentally, Van der Velden says it is debatable whether having two Master's really gives you an advantage in the job market. 'It can look rather weak. If the second Master's is not really connected to the first Master's degree or the Bachelor's, you will not be able to compete so well with students who have done the same Master's degree *and* a Bachelor's in that area. I would advise students to think long and hard about this. Will it improve their CV? And who are they trying to compete with?' ®

Percentage of Master's students doing two Master's



'You have to be good at planning'

CÉLINE HUISKAMP, MASTER'S STUDENT DOING ANIMAL SCIENCES PLUS MANAGEMENT, ECONOMICS AND CONSUMER STUDIES

When Céline Huiskamp got to the end of her Bachelor's, she spoke to the study advisers for two degree programmes. She considered then possibly combining the two. 'I didn't know anyone who was doing that, certainly not with this combination.' Céline thought a second Master's focused on economics would be better than a minor in that field as it would put her in a stronger position in the job market. 'I'm considering working in the financial sector, and a Master's in economics would give a different impression to just a couple of modules.' The student says you don't have to be brilliant to combine two Master's. 'I'm going through my subjects fairly easily but I don't think you have to be particularly talented. You do however have to be good at planning and keeping an overview.' And you have to be prepared to deal with some extra hassle, for example when obtaining your study programme approval (SPA). 'I had two different boards of examiners assessing my set of modules. It took forever before I finally got approval from both.' Céline finds writing two theses the toughest

part. 'Writing is not something I enjoy doing. Also, many people who started my degree at the

same time as me have now graduated so I have to make an extra effort to keep going.'



'I can't choose'

JILL SOEDARSO, MASTER'S STUDENT IN ENVIRONMENTAL SCIENCES PLUS INTERNATIONAL LAND AND WATER MANAGEMENT

Jill Soedarso originally started doing the Environmental Sciences Master's, but in the course of the year she discovered that she was also really interested in International Land and

Water Management. The work related to that study appealed more to her. She was soon looking at the option of doing a second Master's. 'I have a few friends who are doing two

Master's, which is what gave me the idea. On top of that, these two degrees are easy to combine.' Jill does not see herself as an outstanding student. 'I've never had above-average grades. The main reason I'm doing two Master's now is because I can't choose.' Jill combines her two degrees with numerous extracurricular activities because the additional year gives her more time for this. She likes the fact that she can take a little longer to finish her studies: 'Imagine if I'd finished my degree in the set minimum number of years, then I would be working from the age of 23 for the rest of my life! As a student, you have few worries and few responsibilities. I'm quite happy to have an extra year.' At the moment, Jill is mainly studying modules in International Land and Water Management, because she did the environmental courses in her first year. After this, she will need to complete Academic Consultancy Training (ACT), an internship and two theses. Jill: 'I do wonder how enthusiastic I will be about doing a second thesis after I've finished the first one. I may decide to stop then anyway. But my plan at the moment is to do both of them.'

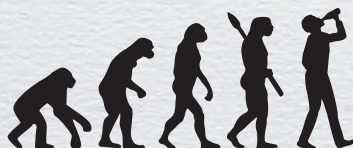


LOOKING

Research by psychologists at Queen Mary University in London shows that men and women look at faces differently. Women look mainly at the left side – actually the right of the face – and examine faces more closely than men. Researchers were able to use the way people looked, as measured by eye-tracking, to predict with 80 percent accuracy whether the subject was a woman or a man.

CHOCOLATE

Nestlé claims it can make chocolate that contains 40 percent less sugar and yet still tastes just as sweet. That means you can eat twice as much chocolate without paying the penalty, or at least being let off lightly. We will have to be patient though as the first new-style Kit Kats will only appear on the market in 2018.

**DARWIN (1)**

Wageningen Brewery is going to let Wageningen residents help decide on the flavour of its new Darwin 1.0 beer. If you order this beer in the De Zaaier, De Vlaamsche Reus, Loburg or Rad van Wageningen cafes, you will be asked to fill in a taste assessment online. The tips will be used to develop version 2.0. So the beer will evolve, and the 'fit-test' beer will survive.

DARWIN (2)

It is questionable whether Charles Darwin was actually a beer drinker. That is not clear. What is clear is that Wageningen's Darwin is not the first beer named after him. You can order a Darwin's Origin in Shrewsbury, the town where he was born. Darwin in Australia is definitely keen on beer: the town has the highest per capita consumption of beer.

Honours programme doubles in size

Two and a half years since the Wageningen honours programme was launched, the executive board has decided to double its size. From 2017 onwards, 60 rather than 30 students will be able to join the programme. The decision was prompted by the positive interim evaluation of the programme and the amount of interest from students.

The honours programme is an extension of a normal Bachelor's programme, offering students 30 extra credits, to be obtained in three years. Participants both deepen and broaden their knowledge, work on their skills and learn to work on projects.

The first years of the honours programme have gone well. Of the first cohort in 2014, 27 of the 30 students got the certificate or are due to get it soon. 'We look back on a nice period, because we have satisfied customers, both the stu-

dents and the teachers. Of the 2015 cohort, it looks as though everyone's going to pass,' says Ellis Hoffland, academic director of the Honours Programme. The students in the first cohort were initially critical of the programme. They were not always clear about the assignments and many of them suffered from stress and too much work pressure. These concerns prompted a few students to conduct a survey. 'Many students felt as though they could end up with a burnout if things went on the way they were much longer,' says Anne van der Heijden, whose honours certificate is in the bag. 'We did get the impression that this was sometimes because students did too many other things as well. Students are expected to put other activities on the back burner. If they don't do that, they feel too much work pressure.' Student Merijn Kerstens, who has

completed the honours programme too, agrees. 'I was doing all sorts of things on top of my studies. It was nice, but you have to make choices. I thought we hadn't been very well informed about that, but I don't see that as a problem. It was a good life lesson to learn when you set the bar too high and should take it a bit easier. We were the first cohort, so it is logical that not everything went to plan.'

Ellis Hoffland can confirm that not everything went smoothly. 'In the past couple of years we've become clearer about what we expect from the students. And about how we evaluate the programme. The level has been defined better. Students have more idea what to expect.' The importance of cutting down on other activities besides the honours programme is always emphasised during the application process, says Hoffland.

MF

WOULD YOU LIKE TO JOIN OUR EDITORIAL BOARD?

The editorial board supervises and defends the mission and identity of Resource, and meets three times a year. We are looking for one student and one staff member. Interested? Email resource@wur.nl



Answers to the End-of-year quiz

1a, 2a, 3c, 4d, 5d, 6b, 7d, 8d, 9c, 10b, 11c, 12a, 13d, 14abcd, 15c, 16b, 17d, 18d, 19d, 20b.

Monopoly on a megaboard

Watch the video
on resource-online.nl.

On the initiative of Ceres, Wageningen students set a new Monopoly record on 30 November, when they played the popular board game for over half an hour on a 30 by 30-metre board. On the athletics track at De Bongerd Sports Centre.

Who has played Monopoly on the biggest board in the world? That is what was at stake in this attempt on a record. The existing Guinness World Record has been held by a school in California since January. To celebrate the board game's 80th anniversary, the game was played there on a board of 744 square metres.

This inspired games manufacturer Hasbro Benelux to attempt to break the record. Hasbro challenged student societies to come up with ideas. Ceres's proposal was selected, and the society invited other Wageningen student societies to join in.

The students' task was simple: to play for over half an hour on the biggest Monopoly board in the world. It had to be the official ver-



PHOTO: GUY ACKERMANS

sion: 'No designs or variations you'd dreamed up yourself,' says Jack Brockbank of Guinness World Records. The 'pieces' walked around with an iron, a wheelbarrow and a real dog.

After half an hour, Brockbank announced that the board used in Wageningen was 900 square metres in size: a new record. **© RK, VK**

MEANWHILE IN... AUSTRIA

'It would be shameful to have a populist as president'

The people of Austria elected a new president on Sunday 4 December. Alexander Van der Bellen, former party leader of Die Grünen, beat Norbert Hofer of the populist Freiheitliche Partei Österreichs. Much to the relief of Master's student Francois Laurent.

'I voted for Van der Bellen of course. I want to see the whole country shifting a little toward the Green party, but I also dislike Hofer so much. You should realize that as well as a political figure, the president of Austria is a symbol of our country, our representative towards the world. I think it would be particularly shameful for that position to be occupied by a populist like Hofer. Van der Bellen is a rebel too, as he is known for disregarding the formalities of parliament, sometimes even swearing at other politicians. But at least he is an idealist. That appeals to me.

Looking at the bigger picture of Austrian politics, the most striking feature of these elections was the absence of the Christian Demo-

crats and the Social Democrats. I think it is the first time since the second world war that neither one of these parties has produced a candidate for the presidency. For the



PHOTO: SANGRIANA/SHUTTERSTOCK.COM

past 60 years, these parties have been dominant in Austria. These elections show an increase in turbulence and change in politics in general. These two traditional parties were also very strongly represented in the boards of state-owned companies. I consider it a good thing that this will change.

Finally, in my view, this election illustrates the new divide in Austrian society. All of my friends who are young, academic and from Vienna supported Van der Bellen. The supporters of Hofer can be found in the countryside, and among the older and less educated population.' **© TF**



Francois Laurent, Master's student of Environmental sciences, illustrates the news in his country.

YOU ON CAMPUS

Every day, there are students standing in the hall of the Leeuwenborch to lure other students into the basement. Once they've got them down there they set about obtaining information for their research on consumer responses. At the moment you might find yourself being lured into the basement for a cup of herbal tea. Thanks to Gabriela Salazar (30) and her interest in beverages.

Gabriela is doing her Master's in Food Technology and is doing her thesis research on tea made from a plant that grows in her home country, Ecuador. 'These leaves are high in caffeine and have effects similar to coffee: mood and cognitive performance are improved', Gabriela tells me. Even though this thesis takes up most of her time, Gabriela also finds time to travel while she's here in Wageningen. 'This summer we tried to see as many places in Europe as possible, before I have to go back to Ecuador'. The 'we' in this sentence refers to Gabriela and her Spanish boyfriend. They met in

Ecuador when they were children, but then he moved to Spain. 'When I moved to Europe we met again after many years'.

'I have also travelled within the Netherlands. Wageningen has an international character so I can learn a lot from other cultures, but other places in the Netherlands are also great. Mainly Rotterdam and that small place with all the water: Giethoorn'. Apart from traveling, Gabriela also loves to cook for

'In Ecuador you go out to work first after your Bachelor's'

friends. 'I like teaching them some cooking tricks. I have also learned other cuisines from my friends'. They are fellow students from her Master's, and she cooks Ecuadorian dishes for them. 'We are family. We see each other as

much as we can. And we will definitely stay in touch when I go back to Ecuador'.

'Yes, I'm old,' Gabriela laughs when she says how old she is. 'I have been waiting to get a scholarship for a long time. But it is also a cultural difference. In Ecuador, after your bachelor you get work experience. Only after getting some work experience do you know what specialisation you want to focus on'. For Gabriela that focus is product development. She wants to start her own beverage company. **AvdH**



PARTIES

In the party mood? Wageningen Party Promotion (WUP) tells you where to find one. See too www.wageningenup.nl.



LUCA – SMALL INTEGRATION PARTY: UIT JE NEST VOOR VOGELPEST

Thursday 8 December from 22:00 to 04:00

Every year there's a small and a big integration party. This is the small edition but no less enjoyable for that! Six study associations have worked together to make this party possible.

CERES – PROPPENFEEST

Friday 23 December from 23:00 to 05:00

A great annual fixture, this party. It started as a celebration of passing the first year; nowadays it kicks off the Christmas holiday. All the exams are over, two weeks off ahead: time to party!

LUCA - HELEMAAL KNETTER NEW YEAR'S EVE

Saturday 31 December from 23:45 to 07:00

There are so many ways to see the new year in. If you decide to stay in Wageningen, Luca is 'the place to be'. Make sure you buy your tickets in time; it's much cheaper. **R**



DJs let rip with their techno during Nachtdier at Argo on 25 November.

PHOTO: SVEN MENSCHER

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.

As famous as Lionel Messi

'Nanjing is a beautiful city with plenty of old buildings and a lot of vegetation. We were surprised to see that in a city with a population of half the Netherlands. Finding our way around Nanjing turned out to be quite challenging as the train station was the size of an airport and all the signs were in Chinese. Luckily, Peter met a helpful local man on the plane who accompanied us to the campus and showed us around Nanjing for a whole day.

HOSPITABLE

Our experiences at Hohai University verified our feeling that the locals were extraordinarily hospitable. For example, our professor regularly took us to have dinner with his parents, wife and children. In our free time we travelled around the country together with him and his students. We really enjoyed getting to know China in the company of locals as they helped us make contact with the culture.

During our trips we could go nowhere unnoticed and attracted a lot of attention. Especially the two-metre-tall Lennart caught the eyes of the residents. People wanted selfies with us all the time and took photos right in our faces without asking. They made us feel as famous as Lionel Messi. At a certain point, two men on a scooter slowly passed by to have a look at us. Not watching where they were going, they crashed right into a car. Nobody was injured.

EATING TOGETHER

The streets in the Chinese cities are very busy and noisy due to the large population. The fact that there are so many people really

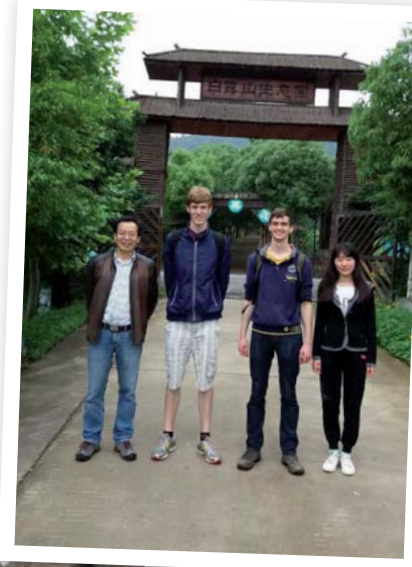
shapes the culture. There is a lot of competition and students work hard, even during their holidays. Another thing we learned is that tasty food and eating together is very important in China. We had extensive breakfasts, lunches and dinners in the canteen and talked for a long time every tea time. After lunch, the university was always quiet since everyone took an hour off to sleep. It was funny to see people lying on benches on campus and professors dozing in their offices.

During our working hours we studied the effect of extreme precipitation on groundwater level, soil moisture and discharge in an artificial catchment. It was great that we could work at Hohai University as the measurement devices they have are unique in the world.' @js



THE WORKS

-
- Who?** Peter Voortman (23) and Lennart Jongen (22), Master's students of Earth and Environment
- What?** Master's thesis on extreme precipitation in artificial catchments
- Where?** Hohai University, Nanjing, China



Read all interviews on
on resource-online.nl.

Forum Irregular Opening Hours Christmas Holidays 2016/2017

	2016	The Building	The Library	Student Desk IT Service Point	WURshop	Restaurant	Grand Café	Wageningen in'to Languages
Friday	23 December	8 am - 8 pm	8.30 am - 5.30 pm	Closed	9 am - 2.30 pm	Closed	Closed	9 am - 5 pm
Saturday	24 December	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed
Sunday Christmas	25 December	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Monday Christmas	26 December	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Tuesday	27 December	8 am - 8 pm	8.30 am - 5.30 pm	Closed	Closed	Closed	11.30 am - 1.30 pm	Closed
Wednesday	28 December	8 am - 8 pm	8.30 am - 5.30 pm	Closed	Closed	Closed	11.30 am - 1.30 pm	Closed
Thursday	29 December	8 am - 8 pm	8.30 am - 5.30 pm	Closed	Closed	Closed	11.30 am - 1.30 pm	Closed
Friday	30 December	8 am - 8 pm	8.30 am - 5.30 pm	Closed	Closed	Closed	Closed	Closed
Saturday	31 December	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed
Sunday New Years Day	1 January	Closed	Closed	Closed	Closed	Closed	Closed	Closed
Monday	2 January	8 am - 8 pm	8.30 am - 5.30 pm	12 pm - 2 pm	10 am - 2 pm	8 am - 7 pm	11.30 am - 1.30 pm	Closed
Tuesday	3 January	8 am - 8 pm	8.30 am - 5.30 pm	12 pm - 2 pm	10 am - 2 pm	8 am - 7 pm	11.30 am - 1.30 pm	Closed
Wednesday	4 January	8 am - 8 pm	8.30 am - 5.30 pm	12 pm - 2 pm	10 am - 2 pm	8 am - 7 pm	11.30 am - 1.30 pm	Closed
Thursday	5 January	8 am - 8 pm	8.30 am - 5.30 pm	12 pm - 2 pm	10 am - 2 pm	8 am - 7 pm	11.30 am - 1.30 pm	Closed
Friday	6 January	8 am - 8 pm	8.30 am - 5.30 pm	12 pm - 2 pm	10 am - 2 pm	8 am - 2 pm	11.30 am - 1.30 pm	Closed
Saturday	7 January	10 am - 6 pm	Closed	Closed	Closed	Closed	Closed	Closed
Sunday	8 January	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 Irregular Opening Hours Christmas Holidays 2016/2017

	Friday 23 December	Saturday 24 December to Sunday 8 January
The Building	8 am - 6 pm	Closed
Bike basement	8 am - 6 pm	Closed
Restaurant	11.30 am - 1.30 pm	Closed
The Spot	8 am - 6 pm	Available for Christmas celebrations, email your request to osp.fb@wur.nl Check the opening days and hours during Christmas Holidays on facebook.com/TheSpotOrion



Leeuwenborch Irregular Opening Hours Christmas Holidays 2016/2017

	2016	The Building	Coffee Bar/ Restaurant	The Library
Friday	23 December	7 am - 10.30 pm	9.30 am - 3 pm	8.30 am - 5 pm
Saturday	24 December	8 am - 5.30 pm	Closed	Closed
Sunday Christmas	25 December	Closed	Closed	Closed
Monday Christmas	26 December	Closed	Closed	Closed
Tuesday	27 December	7 am - 6 pm	11.30 am - 1.30 pm	Closed
Wednesday	28 December	7 am - 6 pm	11.30 am - 1.30 pm	Closed
Thursday	29 December	7 am - 6 pm	11.30 am - 1.30 pm	Closed
Friday	30 December	7 am - 6 pm	Closed	Closed
Saturday	31 December	Closed	Closed	Closed
Sunday New Years day	1 January	Closed	Closed	Closed
Monday	2 January	7 am - 10.30 pm	9.30 am - 3 pm	Closed
Tuesday	3 January	7 am - 10.30 pm	9.30 am - 3 pm	Closed
Wednesday	4 January	7 am - 10.30 pm	9.30 am - 3 pm	Closed
Thursday	5 January	7 am - 10.30 pm	9.30 am - 3 pm	Closed
Friday	6 January	7 am - 10.30 pm	9.30 am - 3 pm	Closed
Saturday	7 January	8 am - 5.30 pm	Closed	Closed
Sunday	8 January	Closed	Closed	Closed

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



Announcements

Wanted: Dutch-speaking WUR scientists

Fancy yourself as a 'scientist in the classroom'? Wageningen University's 'Science Junction' (Wetenschapsknooppunt) is looking for Dutch-speaking scientists willing to teach at a primary school. A short, free course on 'communicating with children' will be offered. You could start from 14 December or from 6 February. Interest-

ed? Email wetenschapsknooppunt@wur.nl of kijk op: www.WUR.nl/wetenschapsknooppunt.

Agenda

Thursday 8 December to
Wednesday 11 January
5 FILMS FOR STUDENTS

Down to earth: an inspiring account of a family who went to live with tribal clans. *La fille inconnue*: superlatively realistic portrait of a young women

doctor with a troubled conscience. As *I open my eyes*: gripping tale of growing up in Tunisia just before the Jamin revolution, with beautiful music. *Shadow world*: informative and artistic documentary about the global arms trade. *Perfetti sconosciuti*: hilarious dinner at which good friends let each other see what's on their smartphones. Venue: Wilhelminaweg 3A, Wageningen.

WWW.MOVIE-W.NL

Thursday 8 December, 19:00 AMNESTY INTERNATIONAL EVENING ON ETHNIC PROFILING

During this evening we will dive into the debates around ethnic profiling. The programme consists of a workshop to see how we are all profiling in our daily lives and presentations by the initiative ControleAltDelete that puts this topic on the political agenda in the Netherlands. There will also be several interesting speakers and there's plenty of room for discussion. Venue: 'Thuis', Stationsstraat 32, Wageningen.

Thursday 15 December, 16:00 SEMINAR WEES: 'INTEGRATING THE CHEMICAL ECOLOGY OF FLOWERS INTO COMMUNITY ECOLOGY'

Dr Robert R. Junker, assistant professor at the University of Salzburg, will talk about how flowers interact with insect and microbial communities, and the importance of chemical and morphological flower traits. He will also lead a workshop. Drinks and discussion afterwards. Venue: Orion C3033.

WWW.WEESWAGENINGEN.NL

colophon

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FILM

FROM 14TH OF DECEMBER

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FILM

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ON SCREEN

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The Nutcracker

The ultimate classic for Christmas!

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Sports Centre de Bongerd Irregular opening hours Christmas Holidays 2016/2017



December

5 December (Sinterklaas)	Closed at 17:00
22 December	Closed at 16:00
24 December	Open 9:00 - 12:30
25 & 26 December (Christmas)	Closed
27-30 December	Open 12:00 - 22:00
31 December (New Year's Eve)	Closed

January

1 January (New Year's Day)	Closed
2-6 January	Open 12:00 - 22:00



PHD party or inauguration?

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>>TYPICAL DUTCH

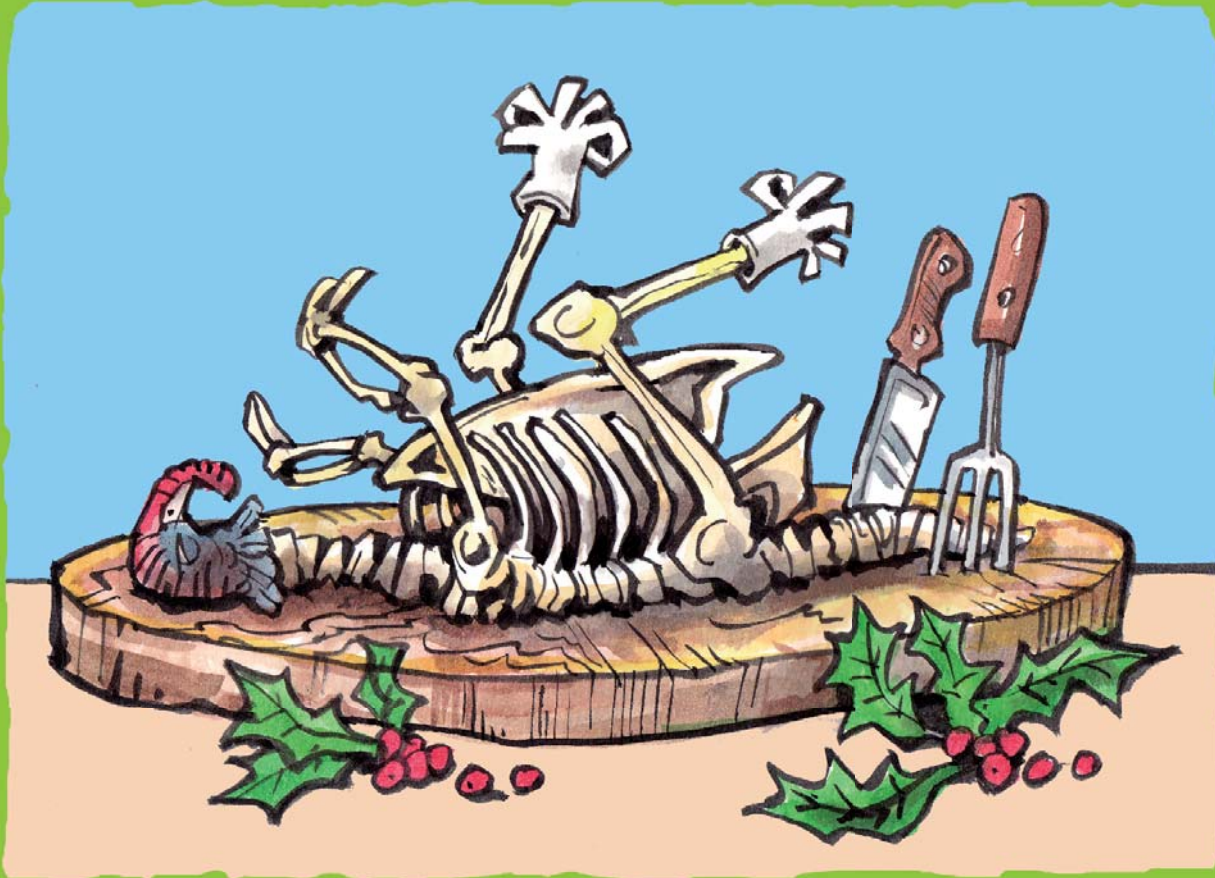



ILLUSTRATION: HENK VAN RUTENBEEK

No food gets wasted

It was my first Christmas dinner with my colleagues in the Netherlands. The dinner was also special to all of us because we were celebrating the 10th anniversary of our Chair group. The dinner was prepared by a caterer and everybody relished the food. However, the most interesting and unexpected part for me came at the end of the dinner. There was still food left and everybody started filling their lunch boxes with the remaining food.

I come from India, where we have an elaborate number of dishes for every occasion and festival. As soon as the guests arrive, the food is served and till the guests leave different dishes keep coming to the table. But in spite of this warm hospitality and rich food culture, on many occasions we tend to waste the leftover food.

It was interesting for me that my Dutch colleagues decided to pack lunch from the leftover Christmas dinner. When I asked about it, they immediately responded that we always do this and never waste any food. I realized that Dutch people may not have a very strong food culture and an elaborate cuisine, but they do not waste any food and they also value it. I think this is a very smart way of ensuring food security at the consumer level.  **Sumit Vij, PhD Researcher in Public Administration & Policy Group, from India**

The Dutch may not have a very strong food culture but they do not waste food

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 euro and Dutch candy.