

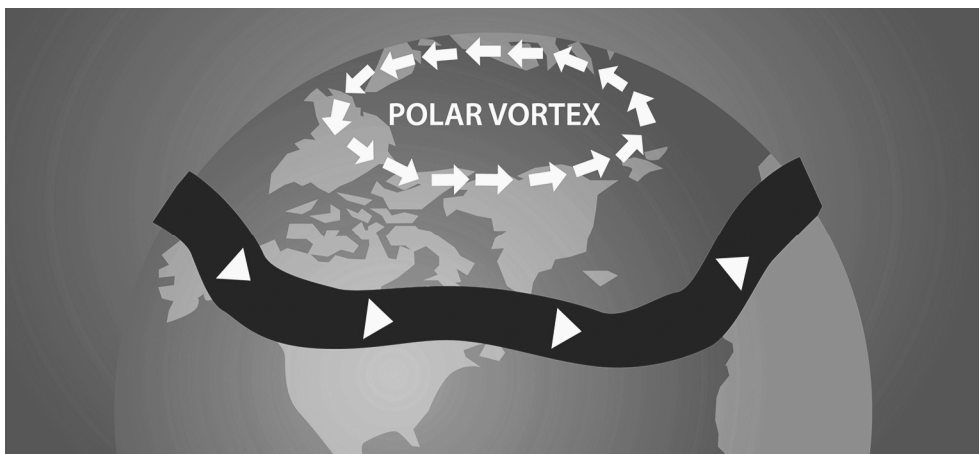
**Bijlage HAVO**  
**2022**

tijdvak 3

**Engels**

Tekstboekje

### The polar vortex



The polar vortex is a large area of low pressure and cold air surrounding the Earth's North and South poles. The term vortex refers to the counter-clockwise flow of air that helps keep the colder air close to the poles.

Often during winter in the Northern Hemisphere, the polar vortex will become less stable and expand, sending cold Arctic air southward over the United States with the jet stream.

The polar vortex is nothing new. 1, it's thought that the term first appeared in an 1853 issue of E. Littell's *Living Age*.

*noaa.gov, 2019*

# Soundalike sweethearts

By Daily Mail Reporter

- 1 If you want to know whether your relationship will last, don't listen to what your partner says but pay very close attention to how he or she says it. The more your other half copies your slang and speech patterns, the more psychologically connected you are. Well-matched couples mimic each other's language during conversations, a study has found. And couples are most likely to perform this "language style matching", or LSM, during happier phases of their relationship, according to American researchers. "Because style matching is automatic, it serves as a window into people's close relationships with others," said Molly Ireland, who helped lead the study.
- 2 Researchers started off studying the language used by almost 2,000 university students as they responded to class assignments written in very different language styles. If the essay question was asked in a dry, confusing way, the students answered in a similarly complex, serious style. But if it was posed in a casual, familiar manner, the students punctuated their answers with slang and terms such as "like" and "kinda".
- 3 To see how this applied to close personal relationships, the researchers then analysed the correspondence of famous writers – such as Sigmund Freud and Carl Jung, who wrote to each other almost weekly over a seven-year period as their careers were developing. By analysing the LSM in their letters, the researchers were able to 4 the two men's tempestuous relationship – from their early days of joint admiration to their final days of mutual contempt.
- 4 Next, the researchers extended the study to romantic relationships by assessing the LSM of two famous couples – Victorian poets Elizabeth Barrett and Robert Browning, and 20th century poets Sylvia Plath and Ted Hughes. The study revealed that major changes in each couple's marriage were mapped out in the poetry. Mrs Ireland said: "Style words in the spouses' poems were more similar during happier periods of their relationships, and less synchronised toward each relationship's end." The varying levels of LSM between the two couples were also revealing – as even at the happiest stage of their marriage, Plath and Hughes were less in sync than the historically more harmonious Brownings were at their lowest point.
- 5 The researchers are now investigating whether language style matching has the potential to quickly and easily reveal whether any given pair – business rivals or romantic partners – are on the same page psychologically, and what this means for their future together.



*Daily Mail, 2010*

## Tekst 3

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### To the Editor:

**Re** "Philadelphia School Battles Students' Bad Eating Habits, on Campus and Off" (news article, March 28):

There is good reason for parents in North Philadelphia to stand guard at corner stores discouraging kids from buying their favorite junk foods. Nothing less than our national security is at stake. America's military strength 7 its young people. Unfortunately, one in four young adults nationwide is too overweight to join the military. In many ways, our nation is becoming too fat to defend itself. This is why more than 200 retired admirals and generals, including me, strongly supported new federal child nutrition legislation, passed last December, aimed at getting junk food out of our schools and improving the nutritional quality of foods served to students.

DENNIS L. BENCHOFF  
Lancaster, PA.

*The writer, a retired United States Army lieutenant general, is a member of the Executive Advisory Council, Mission: Readiness.*

*nytimes.com, 2011*

## In Bloom

By Chris Suellentrop

1 I recently decided to spend more than \$400 because I wanted to play a \$10 game. I bought a PlayStation®3 so that I could download Flower, a marvel of a game that casts the player as a series of petals floating in the wind.



2 What's remarkable about Flower is the sensation it creates, from start to finish: simple, almost indescribable joy. Kellee Santiago, the president and co-founder of Thatgamecompany (TGC), the game's publisher, says in an accompanying behind-the-scenes video that Flower is "the video game version of a poem" and that its purpose is to create "an emotion" in those who play it. Flower, which at least for now is exclusively for sale on the PlayStation Network of downloadable games, is not unique in that ability — other games successfully create fear, or nervousness, or exhilaration (or controller-hurling anger) — but it is the only game I've played that made me feel relaxed, peaceful, and happy. What's the point of it? Only that. Which is plenty.

3 .....

4 .....

5 .....

6 Not everything in the game works. The musical score is less effective — and less affecting — than the game-play, and sometimes the imagery goes too far into rainbows and doves and other decorative elements you might find on the walls of a sixth-grade girl's bedroom. (Thankfully, there are no unicorns.)

7 But it is hard to be cynical about the game's small flaws. Overall, Flower is a delight. The PlayStation®3's motion-sensitive controller adds to the game's airy quality. Flower asks those who play it to turn the controller elegantly through space, rather than forcefully thumb around joysticks and mash buttons. What the game asks the player to do physically complements what it wants the player to experience emotionally. This isn't a game that's willing to relinquish control to the all-important you. Flower demands that you relinquish control to the game and its designers, and it's all the better for asking its players to surrender themselves to it.

*slate.com, 2009*

### Gentlemen and Hooligans

adapted from an article by Gavin Mortimer



- 1 Most British sports fans are familiar with the saying that 'football is a game for gentlemen played by hooligans, and rugby union is a game for hooligans played by gentlemen.' But something strange has happened in the past season or two. This current crop of footballers, particularly the ones wearing the England shirts, are polite and presentable. Not only that, but their enthusiasm for their sport is infectious and it says much about their wholesome image that the most the tabloids can reproach them for is the odd indiscrete tattoo.
- 2 In contrast, the England rugby squad are a sullen and joyless bunch. During the recent tour to South Africa, two of their number were involved in what the BBC 12 described as a 'post-match confrontation'. Another two of this season's squad have been convicted of drink-driving and the captain, the man supposed to lead by example, has been banned for a total of 60 weeks in the course of his career for biting, punching, eye-gouging, verbally abusing a referee, elbowing and headbutting. Harry Kane, the clean-living captain of the England football team, who avoids nightclubs and alcohol, has never been sent off for England or Tottenham.
- 3 Before I go any further I should point out that rugby is 'my sport'. I spent 25 years playing the game, I broke bones, tore ligaments and collected an impressive cauliflower ear for the cause. But I barely recognize rugby union

today. It has become a nasty, dangerous, gladiatorial sport, played by men with too much muscle and too little skill.

4        Nowadays, most players go straight from school into professional rugby, and therefore haven't the well-rounded backgrounds of their amateur predecessors. What they do have, however, is a handsome salary, and this has turned many into strapping spoiled brats. They constantly question decisions made by the referee with whining insolence while touch judges are subjected to looks of snarling contempt. The disrespect is filtering down to the amateur ranks and in the past year alone two referees have been assaulted by players. In recent years we've seen the emergence of bad sportsmanship: players purposely diving or feigning injury in an attempt to have an opponent sent off and even the brandishing of imaginary cards in the hope it will prompt the referee to reach into his pocket for the real one.

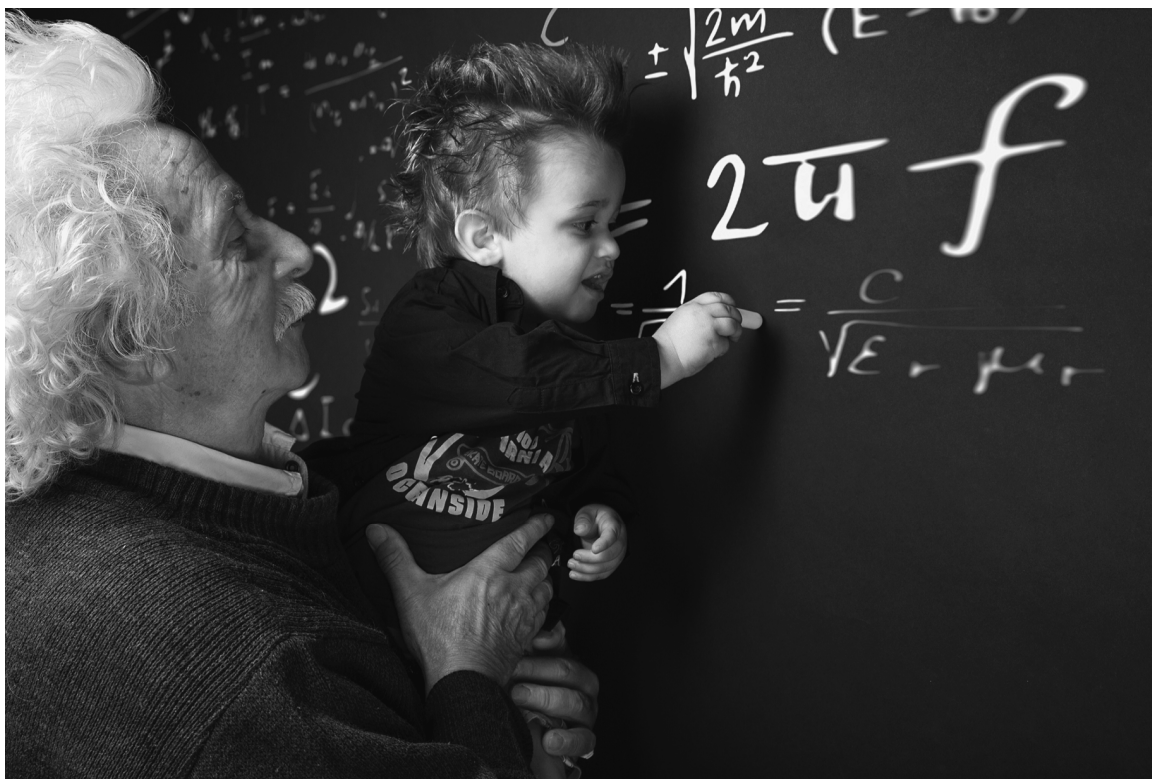
5        I will be relieved if my children don't want to play senior rugby. I'm not fearful of the sport's physicality, for me it's the vulgarity. That's why when I go to the park for a kick-about with my daughter, the ball is a round one.

*The Spectator, 2018*



### There's no escaping competitive parents

adapted from a column by Fiona Gibson



- 1 A primary class has been asked to make models out of jam-jar lids. When I run into a mother at a local get-together, she tells me her son has made his lid into a functioning clock. Another parent reveals that her child's creation incorporates a concealed engine and can perform a three-point turn. She finishes with a roll of her eyes, as if to say, 'I know, genius ... but what can you do?'
- 2 Nothing parents like to boast more about than their children and how they have raised them. 'Are your children early readers?', a woman once barked at me, clearly meaning, 'Mine are! My 9-year-old insisted on reading *Animal Farm*.' Cue small pause to be filled with gasps of awe. 'Sorry Kate wasn't at your drinks do,' a neighbour bellowed across our busy high street recently. 'She was in St Andrews taking Max back to *university*.' The last word was belted out loud enough to pierce the eardrum of every shopkeeper and person driving past. I wanted to yell back, 'I know Max got into St Andrews. Anyway, must dash as I'm helping my kids pack for *prison*.'
- 3 I'm not saying we should put down our offspring. Yet this perpetual bigging up of their achievements is especially irksome, as it's not really about these fabulous young people at all. It's about the wonderful job the parents have done raising them. 17 you can't even escape it in the safety of your own home. These days, it's impossible to log on to Facebook without



glimpsing little Tabitha being presented with a trophy by a member of the royal family, or Sebastian's exam results being trumpeted for all to see (175 'likes').

4 If this sounds like sour grapes, I don't mean it to be. I was delighted when a close friend's son performed his own songs for the first time and thrilled for another friend's daughter when she won the chance to study in the States. That's because I've known these kids for years and, more importantly, the information was delivered in a non-bragging way, rather than blasted into my ear at the chemist's.

5 Still, there's a glimmer of hope that all is not 19: when I popped into school to view the jam-jar lid creations, the delicate workmanship led me to suspect that many a parent had been up all night, cursing over tiny engines, clock hands and congealing tubes of Evo-stik.

6 The one exception was the work of Thomas, my friend Laura's 10-year-old son. He had merely scrawled on his lid with a fat felt tip and, when asked what it was, replied, 'A beer mat'. As Laura and I surveyed the gallery, she remarked, 'At least Thomas made the beer mat all by himself.' I stared at it and tried to think of something positive to say. 'It's still rubbish,' she said.

*Sainsbury's Magazine, 2012*

### What Entrepreneurs Can Learn From Gareth Southgate

Holly Maguire, guest writer, UK Managing Director at Superunion  
Opinions expressed by *Entrepreneur* contributors are their own.

- 1 'Nice' is one of the most 21 words in the English language. It is perceived as gentle, weak, even submissive, but it is in fact insanely powerful. Nice engenders respect and followership. Nice puts you in first place, not last. The one lesson I want to impart to those starting a business is to commit to kindness and be a bit more like current Men's England Football Manager Gareth Southgate.



- 2 Entrepreneurial role models have all too often been cut from the same cloth. We have grown up in a world where bullish, bulldozing and 'bully boy' characters succeed. The recent high-profile unseating of this type of leader has put a spotlight on the new type of leader that the modern world is demanding.
- 3 Southgate's leadership of the England team is a great example of the resurgence of 'nice'. The reign of Gareth Southgate as England Manager has been one of positivity and cooperation, for both players and fans. In contrast with other England managers that banned players from interacting with their wives, he has embraced players' families. Southgate trusts his players and encourages them to take responsibility for their own actions.
- 4 Just as football teams rely on the people within them, around them and supporting them, businesses are built for people by people. If you build your company on toxic foundations then you will have a bad footing on which to engage your customers. In a fully connected world, company walls are see-through. Internal culture is now your brand culture. Your everyday actions and words are made visible to your prospective talent, suppliers, collaborators and, most importantly, customers. Authenticity, respect and courtesy are demanded. If you lead with kindness, every part of your business will be infiltrated and your brand will be enriched.
- 5 Following Gareth's lead, I've put together three tips we use at Superunion to encourage a kinder workplace:

6 **26**

Southgate has propelled his team to success via encouragement and civility. As business leaders you need to check that your urgency and drive to get things done don't translate to rudeness and incivility. It will demotivate your team, create a culture of fear and paralysis and impact productivity and pro-activity.

7 **Reduce anonymity**

In particular, reduce the language of anonymity. Make people feel recognized as individuals. Don't call a mixed group 'guys' or a woman 'man', 'mate' or 'babe' — ask them how they'd like to be addressed. Greet them personally when you see them, say hello when you pass on the stairs. Remember their partner's and their kids' names. Show you care about them as people. Create a culture where people are allowed to be themselves at work, bringing their personality with them. The less people feel like a cog in a wheel, the more motivated they are to give all of themselves.

8 **Be present**

After taking the job, Southgate organized a secret trip to a Royal Marine training camp in Devon for the England team to prepare for World Cup qualifiers. The trip — albeit not football related — broke down barriers between players such as club loyalties that have plagued successive England managers over the past 20 years. As with this team trip, creating and protecting the time to talk at a personal level and carving out the space to simply enjoy each other's company, helps build rapport and trust. Plus this time together may help you find a solution to a work problem in an unexpected place.

9 Forget 'nice guys finish last' — be more Southgate and see for yourself.

adapted from *entrepreneur.com*, 2019

### From up above

adapted from an article by Davide Banis



- 1 The most pressing challenges for humankind are transnational and so complex that no country has enough resources to tackle them by itself. But even in the case of issues that apparently affect just a single country, solving them always requires the conjoined effort of many states. Technology has entangled the world in a web of relations and there's no way back.
- 2 However, it's evident that in Europe, and in the Western hemisphere in general, nationalism is making a comeback and there's an increasing number of people that find it difficult to think beyond the boundaries of their own country. This is literally a quite limited horizon. If we want to tackle global issues such as climate change, we need to start thinking of the Earth as a single entity, beyond the narrowness of national borders.
- 3 The only people who truly experience the Earth as a single entity are astronauts. From space, astronauts can contemplate the planet as a minuscule dot, lost in the sea of nothingness. Viewing the planet from space has changed many astronauts' perspective on the planet itself and on other earthly matters. Among the many spacefarers who reported this cognitive shift in awareness — that is known as 'overview effect' — there's the Canadian astronaut Chris Hadfield who said that, while orbiting Earth, he felt more connected to the people on the planet than ever before. Unfortunately, by June 2018, only 561 people had made it to space and experienced the Earth as a single environment.
- 4 But what if we could get hundreds of thousands of people to experience the 'overview effect'? Even better, what if every child had this chance? After all, a child's mind has not yet been molded and made rigid by decades of news

about wars over borders and similar matters. Children who have experienced the 'overview effect' would probably become adults more prone to see the Earth beyond the narrowness of national boundaries and interests, eventually resulting in a new population better equipped to front global challenges such as the climate breakdown.

- 5 In a way, this is the goal of a newly established Dutch organization called Spacebuzz. A few days ago, while ruminating over these issues, I bumped into their website. Their mission statement is to become "an educational project to inspire children worldwide to become ambassadors of our planet through the experience of viewing Earth from space like an astronaut." In particular, they want to visit schools with a custom-made immersive virtual reality experience and make children aged between nine and twelve experience the 'overview effect' as if they were astronauts hanging on in space. The project, which is encouraged by real-life ESA astronaut André Kuipers, is still in its launch phase but it already looks like a promising stride in the right direction.
- 6 "Our planet is a lonely speck in the great enveloping cosmic dark." That is how astronomer Carl Sagan described a photograph of Planet Earth taken by space probe Voyager 1 in 1990 from a distance of about 6 billion kilometers. He added: "In our obscurity there is no hint that help will come from elsewhere to save us from ourselves." So it is up to us to (try to) stop climate change and find sustainable ways to grow and develop. And it's up to us to solve these problems together, beyond outdated national borders. A project like Spacebuzz will definitely help.

*forbes.com, 2018*

# Mosquitoes increase disease risk in USA

adapted from an article by Doyle Rice

- 1 Mosquitoes are more than just an annoyance for the itchy red bites they leave on our skin. They increasingly raise the prospect of spreading deadly diseases normally not found in the USA, experts warn. The risks include dengue fever, usually found in South and Central America, the Caribbean, Southeast Asia and sub-Saharan Africa, but which was reported in Key West in May 2010, and in Hawaii earlier this year.
- 2 The USA is increasingly at risk from this and other diseases "as world travel increases, public health and control programs fail, and climate change alters mosquito ecology and habitats," cautions Laura Harrington, an entomologist at Cornell University in Ithaca, N.Y. Mosquito-transmitted diseases, such as malaria and dengue, affect more than 350 million people worldwide each year, Harrington says, leading to more than 3 million deaths. There is no vaccine and no treatment for dengue.
- 3 Entomologists at Cornell are seeking funding from various federal agencies to help investigate new strategies to control diseases from mosquitoes. They're looking at ways to reduce egg production and curb the female mosquito's appetite for blood. Also, they're developing forecasting models to study how climate change will impact mosquito-borne diseases. Higher temperatures, coupled with rain, are the best weather conditions in which mosquitoes can breed, Harrington says.
- 4 37, Cornell-affiliated researchers warn that infestations of bedbugs, which also enjoy the warmth, tend to increase in the summertime. They're infesting homes, hotels, dorms, labs and airports worldwide. Although they are not known to transmit any diseases to humans, "they play with our emotions," reports Jody Gangloff-Kaufmann, an urban entomologist with the New York State Integrated Pest Management Program in Babylon, N.Y. "The stress of dealing with them, and the depression and isolation that comes with them."



*USA TODAY, 2011*



### LETTERS: **Social Media?**

As a parent, educator and psychologist, I found "The Flight From Conversation," by Sherry Turkle (Sunday Review, April 22), particularly relevant. Social media enable us to communicate but replace face-to-face time with others and impede having real connections.

Ms. Turkle points out that in lacking conversations, we also have fewer opportunities to self-reflect. Children develop in the context of a relationship. Emotions drive behavior and are central in all relationships. These emotional connections give us feedback toward a heightened self and social awareness, promoting thinking, reflecting and an understanding of what is going on within and between us. They are very important for our social development and are lacking in social media communication.

For our children truly to become successful personally, socially and academically, we all need to start connecting emotionally. We need to stop looking at our smartphones and smarten up by looking within ourselves and among one another!

DONNA HOUSMAN  
Weston, Mass.

In noting the disappearance of conversational skills caused by texting, e-mailing, tweeting and so on, Sherry Turkle echoes J. B. Priestley's<sup>1)</sup> uncannily prescient observation: "The more elaborate our means of communication, the less we communicate."

RICHARD BOYCE  
San Francisco

Sherry Turkle accurately describes the world of online connections. The irony is that those who want to engage in real face-to-face conversations are too often forced to endure intrusive cellphone monologues in restaurants, theaters, commuter trains, airline cabins ...

LARRY SCHLACK  
Kalamazoo, Mich.

*nytimes.com, 2012*

noot 1 J.B. Priestley (1894-1984) was an English novelist, playwright and broadcaster

*Lees bij de volgende tekst eerst de vraag voordat je de tekst zelf raadpleegt.*

## Tekst 11

All You Need to Know About...

# drones and farming

adapted from an article by Lauran Elsdon

### 41-1

Drones — or unmanned aerial vehicles (UAVs) can range in size from just a few centimetres up to 14 metres, but in most cases are just over half a metre long. The term 'drone' was coined in reference to the small aircraft used for the target practice of battleship guns in the 1920s. Although most people will have first heard of drones in connection with military use overseas, they are now being utilised more frequently for routine tasks much closer to home. Agriculture is one area where they have proved to be incredibly valuable, undertaking myriad tasks such as soil analysis, targeted application of pesticides and fertilisers, storm tracking, safety reporting, pollution control and air monitoring. First used by farmers in Japan in the 1980s, specifically designed 'agricultural drones' are now available with a huge variety of functions and capabilities — basic models cost just £50, while more state-of-the-art devices can exceed tens of thousands of pounds.



### 41-2

In today's world, where it can be increasingly challenging for small-scale farms to remain financially viable, being able to monitor livestock remotely or apply the correct amount of fertiliser, down to the last millimetre, can make a much-needed difference. Drones can also be used in the popular farming management concept known as 'Precision Agriculture', which would otherwise be inaccessible to smaller farms. The list of what drones are capable of seems almost endless — having an aerial view of farmland, for example, can help to identify problems, such as irrigation issues, much quicker than if it was checked from ground-level. Some drones are also capable of spraying crops with pesticides more accurately than a traditional tractor. This not only reduces costs, but lessens the exposure of workers and the surrounding countryside to potentially harmful chemicals. Drones can give farmers a bird's-eye view of their crops and livestock, making it easier to spot potential problems, and apply fertiliser accurately.

### 41-3

Concerns surrounding agricultural drone use relate predominantly to privacy, trespassing and the damage to property and livestock. These worries are compounded by the fact that this form of technology is so new that laws and regulations are still in their preliminary stages. Guy Smith, vice president of the National Farmers Union (NFU), commented that while exciting developments could keep British farming at the cutting edge and internationally competitive, the government also needs to take into consideration issues such as antisocial misuse and introduce measures to protect farmers and landowners. Ross Murray, president of the Country Land & Business Association (CLA) – which represents landowners, farmers and rural businesses – also voiced concerns as to whether drones being flown over private property or land are being operated legally, professionally and safely. There are also worries that increased use may have a negative impact on the number of jobs available to agricultural workers.

### 41-4

With sales predicted to exceed \$1 billion worldwide by 2024, the popularity of agricultural drones shows no signs of slowing down. As technology becomes more advanced and far-reaching, UAVs will have the capacity to help farmers in a variety of new and valuable ways. Researchers at Imperial College London's Department of Life Sciences, for example, are developing drones that could detect plant disease before any visible signs – such as leaf discolouration – show, allowing farmers to stop infections before they cause too much damage to crops. The hope is that government legislation will soon catch up, ensuring drones are operated safely and responsibly. However, for now, there are a number of privately run courses available to farmers who would like to learn about the safe operation of agri-drones (as they are sometimes known), such as the one run by independent auditing organisation BASIS – visit [basis-reg.co.uk](http://basis-reg.co.uk) to learn more. The Civil Aviation Authority (CAA) also provides information and authorisation for non-commercial drone use ([caa.co.uk](http://caa.co.uk)).

*Country Living, 2018*