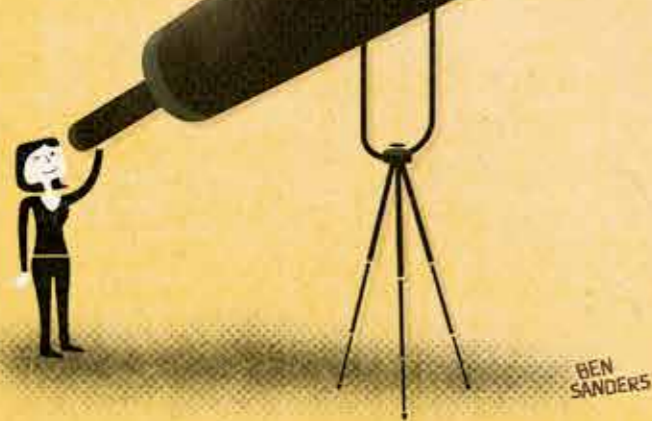


TRENDSETTERS

The futures of people around the world are being shaped by similar forces. We meet Aussies riding the crest of change.

STORY BY FIONA MACDONALD
PHOTOGRAPHY BY RALPH ALPHONSO
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THINGS AREN'T THE same as they once were. Social media, climate change, population growth, smartphones – you don't need a scientist to tell you the times are a-changing. But knowing where we're headed next is a tad cloudier.

Throughout history, industries and empires have tried earnestly to anticipate threats, directions and appetites, but these predictions have often involved quackery, mysticism and guesswork, and some have resulted in costly misjudgements.

We are increasingly turning to science to reduce uncertainty about our prospects, and this has led to a new field of research. 'Future casting' aims to help society – businesses, governments and individuals – prepare for change by projecting the future. Dr Stefan Hajkowitz, the leader of CSIRO's Futures division in Brisbane, Queensland, admits there's still a little imagination involved, but says there is a lot of research that can make predictions more accurate.

His team surveys sectors, such as sport, farming, fashion and media, and looks to other indicators, including the job market and spending habits, to identify small-scale trends. By considering these

together, and discussing them with international experts in each field, the researchers get an idea of the common factors driving trends around the world.

Stefan's group has identified six 'global megatrends' – major changes in environmental, social and economic conditions – that are already underway, and which the experts predict will permanently shift the focus of our society within the next 20 years. The changes won't just affect one demographic or country; driven by technological advances, population growth and the rising expectations of the world's growing middle class, they're major upheavals that will be felt around the globe.

We talked to Australians who have capitalised on these shifts through forward thinking and innovative harnessing of technologies. These people have been able to bring about economic, social and environmental benefits simultaneously.

"These megatrends will impact the way we live and how we're able to function in society," says Stefan. "It will be gradual at first but, if we jump 10 years into the future, things will look massively different." AUSTRALIAN GEOGRAPHIC found six inspiring people who are right on trend. ▶

13 MILLION

Aussies are connected to the internet for 18 hours a day; 3.6 of those hours are spent on social media.

Online retailing
accounts for about

6%

of Australian retail sales.
It's expected to grow
between 10–15% per
annum.

By **2020**, the Australian Government plans to double the number of Australians working from home, so that at least 12% of employees can benefit from this option.

THE USERS OF SOCIAL MEDIA SITES NOW DWARF THE POPULATIONS OF MANY NATIONS:

FACEBOOK USERS **800 MILLION**
SKYPE USERS **521 MILLION**
TWITTER USERS **380 MILLION**
POPULATION OF CHINA **1.3 BILLION**
POPULATION OF USA **312 MILLION**
POPULATION OF INDONESIA **251 MILLION**

Kodak experienced a loss of

US\$10 BILLION

between 1996 and 2011 after failing to change its business and incorporate online and digital technologies.

About
US\$252 BILLION

worth of work was estimated to be 'offshored' using the internet in 2010 – an increase from US\$81.4 billion in 2005.



VIRTUALLY HERE

We'll be more reliant on the virtual world to form communities, share news and do business with like-minded people around the globe.

IN A CRAMPED TRACTOR cab in Victoria, just after the sun has risen enough to shake off the pre-dawn grey, a 63-year-old station manager is tweeting about the heavy rain overnight. In NSW, a fourth-generation cattleman sympathises as he checks his fences; it's been a tough winter.

From her home in Ayr, in northern Queensland, Alison Fairleigh follows the interaction with interest. She has been working towards this online community since 2008, when the suicides of three men from her community derailed her teaching career.

Alison now works with the Mental Illness Fellowship North Queensland and is a co-founder of Rural Mental Health, which teaches farmers about social media and uses blogs, Twitter and Facebook to increase awareness of mental illness and counselling options. When the people who need help live hundreds of kilometres from their closest neighbour, technology is extremely useful.

"Many farmers are living below the poverty line," Alison says. "They can't afford the petrol to go into town or talk to anyone about it, and all this compounding stress leads to mental health problems and thoughts of suicide." But, with a little motivation from Alison, many farmers have formed online support groups, sharing their experiences and even turning to e-counselling. "They're having the exact same conversation they would be having over the back of the ute, but now it's online," Alison says.

Professor Gerard Goggin, of the University of Sydney, is an expert on how digital technologies will change our lives. He says such online communities are just one way we'll use the internet to connect, do business and seek help. In 2012, 37 per cent of the world's population used the internet frequently, a more than fivefold increase since 2000. As this grows, people will spend more of their time in this virtual world. No longer limited by geographic location, we'll be able to tailor our news, friends and hobbies to suit us.

"Technologies are being woven into the texture of people's everyday lives," Gerard explains. "What I predict happening is this real blend of online and offline. I don't think people will separate virtual and real life as much as they did a decade ago."



▲ **Sweet success.** Sugar cane is harvested on the Ayr, QLD, farm of Jim and Jan Jones. Jan plans to start a support network for rural families after attending Alison Fairleigh's workshops.



▲ **Rural connection.** Alison is helping to improve the mental health of Australians in remote areas through social media.

And instead of being brought together by proximity, he says, people will use shared interests to form "neighbourhoods" online – just as Alison's farmers have.

"They've really found their tribe, people who understand them and what they're going through," Alison says. The trend has changed her life and she believes rural people worldwide will adopt it. "For me that's what connectivity is all about," she says. "It doesn't matter who you are, how poor you are or where you come from. On the internet everyone is empowered and everyone has a voice." ▶

STATISTICS: PRODUCTIVITY COMMISSION (2011); DEPARTMENT OF BROADBAND COMMUNICATIONS AND THE DIGITAL ECONOMY (2011); GEREFFI AND FERNANDEZ-STARK, POLICY RESEARCH WORKING PAPER 5262 (2010); EXACTTARGET'S DIGITAL DOWN UNDER REPORT (2012).

GREAT EXPECTATIONS

The social and environmental impacts of the products we buy and the experiences associated with them will play a greater role in our choices.

SIMON GRIFFITHS IS ONE of those people always looking for more. The co-founder of not-for-profit bar Shebeen and loo paper manufacturer Who Gives a Crap has made a career out of high expectations.

Although Simon loved his work in the corporate world after university, he hated its emphasis on money. So he took sabbaticals and volunteered with NGOs. Eager to use his business acumen, he brainstormed consumer-friendly products that could raise money for people in need. As a result, in 2012 Who Gives a Crap was born – a recycled toilet paper, half the profits of which go to installing waste management facilities in the third world.

Around the same time, Simon's co-founder in another business, Zanna McComish, returned from Africa. "She had been sitting on a beach in Tanzania on a broken chair drinking a warm beer and it was the best beer she'd ever tasted," explains Simon. "It doesn't really make sense because, who likes warm beer? But there was something about that feeling of being there. She posed the question of whether we could re-create this kind of experience in Melbourne, where there's a thriving hospitality environment, and also use the profits to generate support for projects in the countries we get the products from."

The idea led to Shebeen, a ramshackle laneway bar in Melbourne's CBD, filled with patrons keen to drink exotic booze and finance third-world development projects. Simon says both companies couldn't have succeeded five years ago, but now consumers are increasingly engaged in a product's back story. Instead of just buying a beer, they also want to do good.

Mark McCrindle, a social demographer based in Sydney, believes Simon has picked up on a trend driven by the internet – a wish to get more bang for our buck. "What was yesterday's optional is now today's standard," he says. And it will change our spending and day-to-day activities. Instead of buying instant coffee, we now patronise a cafe that sells organic, fair-trade beans and promotes the story of its coffee growers. Shopping holidays may be replaced with more immersive experiences, such as volunteering.

"Research shows people are expecting more personalisation and value from their products while



▲ **Augmented reality.** Simon Griffiths is a social entrepreneur, and the founder of Shebeen and Who Gives a Crap.



▲ **Drinking with purpose.** Shebeen is a Melbourne laneway bar where the profits support projects in developing-world nations, such as Laos, Cambodia and Namibia.

paying less, and that includes things like having it made sustainably or being fair trade. Companies are going to have to provide more," says Mark.

Although it puts pressure on retailers, Simon hopes the trend will lead to more ethical and environmentally friendly consumerism and he believes it's created a new revenue stream for charities.

"We're now focusing on making our products better, more accessible and more efficient so that we can raise even more money for projects in the developing world," he says. ▶

STATISTICS: U.N. WORLD TOURISM ORGANIZATION; TOURISM RESEARCH AND MARKETING (2008); ECOTOURISM ASSOCIATION OF AUSTRALIA (2001)

78% of consumers feel brands that create unique and personalised content are more interested in building a relationship with them.

250 businesses in Australia and NZ are now licensed to trade in certified fair-trade products – a 15% increase from 2009.

In the past 10 years, monthly turnover has slowed for all Australian retail sectors, except cafes, restaurants and takeaway outlets, which saw it grow from \$28.7 million to **\$31.3 million.**

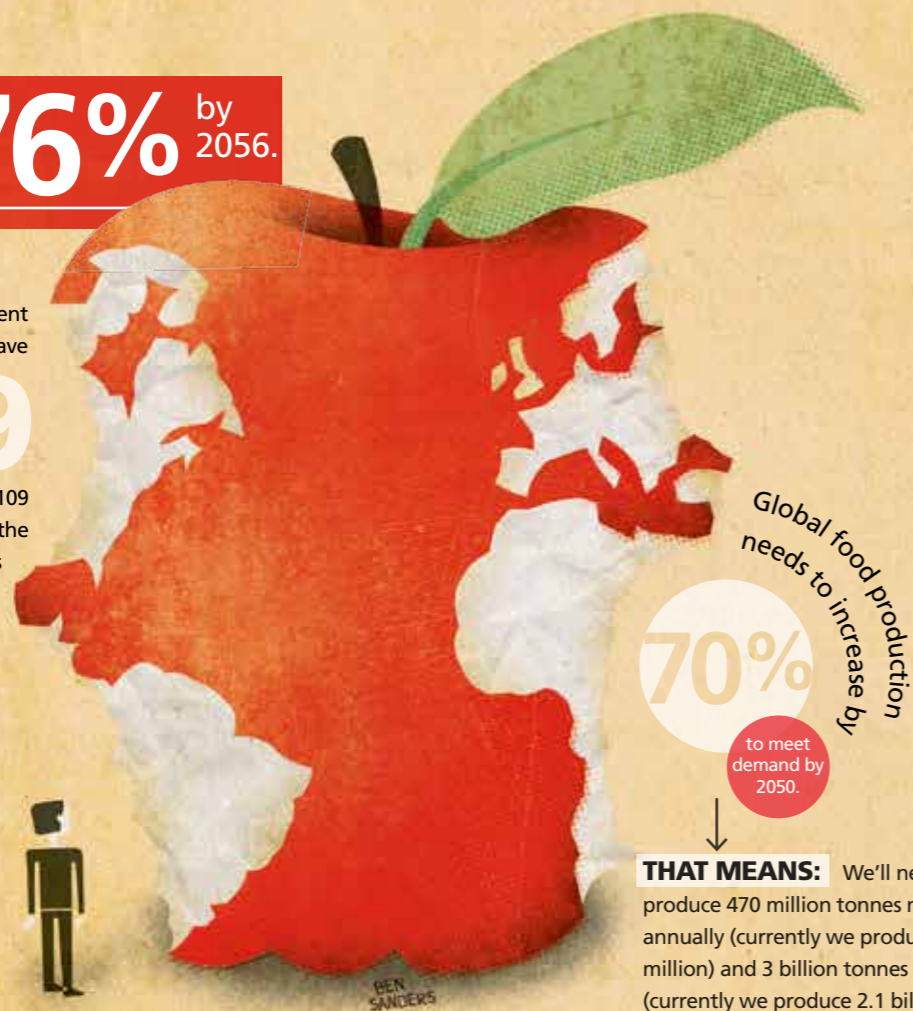
There are **1.6 MILLION** volunteer tourists a year; the industry is worth up to \$2.6 billion worldwide.

There will be about 1.6 billion eco-inspired trips taken by 2020.

Cocoa and chocolate fair-trade purchases in Australia increased from \$5.5 million in 2009 to \$87 million in 2010.

Australian water consumption is forecast to rise **76%** by 2056.

Based on current global usage, we have **52.9** years of oil left and 109 years of coal. But the global demand for oil is predicted to increase by 18% by 2035.



Global food production needs to increase by **70%** to meet demand by 2050.

THAT MEANS: We'll need to produce 470 million tonnes more meat annually (currently we produce 200 million) and 3 billion tonnes more cereal (currently we produce 2.1 billion).

Each year we're losing **120,000SQ.KM** of farmland due to degradation and over-cultivation.

TO SEE Ralph Alphonso talking about his green design, download the **viewa** app and use your smartphone to scan this page.



MORE FROM LESS

The Earth is fast running out of water, land, oil and minerals. If we don't adapt to living on less, prices will skyrocket, people will starve and conflicts will fester.

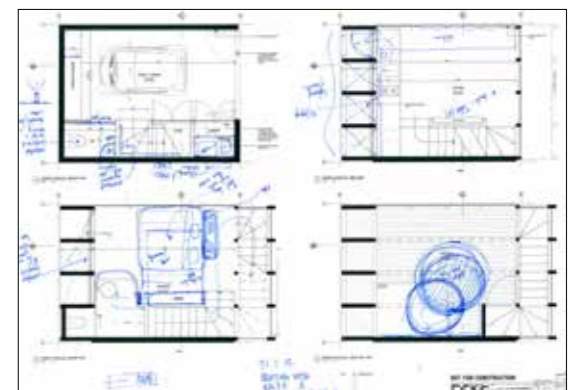
ON A 4 X 5M PLOT down an East Melbourne laneway, AUSTRALIAN GEOGRAPHIC photographer Ralph Alphonso is attempting to build a liveable apartment on a leftover slab of land. "I was going to build a garage or an extra room but I live here by myself and I thought, 'Do I really need this space?'" he explains from his current living room, which has twice the floor area of his soon-to-be-built home.



▲ **Small but perfectly formed.** Photographer Ralph Alphonso (who captured the images for this story) is creating an innovative city apartment with a tiny footprint.

When he looked for examples of carbon-neutral buildings for inspiration, he struggled to find one locally that looked at the whole picture – including where products originated from and lifestyle. "I found it frustrating. A lot of architects were talking about what could be done, but I wanted to actually do it. Waiting for someone else to go first isn't my thing," he says, with a smile.

Putting his money on the line, Ralph decided to try to create a carbon-neutral property using commercially available technologies and a design aesthetic that would encourage people to get by with less space and fewer resources. To that end, he is blogging about his project so other people can learn from it, even if he fails to reach all his targets.



▲ **Sustainable blueprint.** Squeezed onto a surprisingly small plot, Ralph's house will be carbon neutral with a small footprint, but also beautifully designed.

Ralph says he's doing it out of necessity. "The writing is on the wall as far as the fact we're going to run out of fossil fuels goes. The change needs to be made in our generation or we're doomed," he says. "You can create an eco-village 100km out of Melbourne that's sustainable – but their food has to get there and people still have to come and go. We just don't have enough land to sustain the whole population of the world that way."

Professor Ian Lowe, president of the Australian Conservation Foundation, says that the Earth has a theoretical threshold of 7 billion people, but global population is predicted to hit 10 billion by 2050. "The projections suggest that within a few decades we will be really feeling the effects of dwindling oil reserves and food shortages," he says.

Prices are set to soar, and wars over resources will be commonplace. The trick is to learn to get by on less now, rather than being forced to do it later, argues Ian, who hopes this looming threat will drive

innovation of the kind Ralph champions, while we still have time to choose it.

And given how slow government and industry has been to address the problem, it will be up to individuals to become more efficient. Ralph says making his effort has been a breeze and he hopes others will think that. "People will believe they can do it too, that's the ultimate goal," he says. "Everybody just needs to do a little bit for us to be able to move forward." ▶

STATISTICS: INTERNATIONAL WATER MANAGEMENT INSTITUTE (2007); UNITED NATIONS (2011); BP STATISTICAL REVIEW OF WORLD ENERGY (2013); INTERNATIONAL ENERGY AGENCY (2011); WATER SERVICES ASSOCIATION OF AUSTRALIA (2010).

FOREVER YOUNG

Many developed nations, Australia included, have a rapidly ageing population. We need to find a way to transform this liability into an economic asset.

PEOPLE WORLDWIDE are living and staying active longer. It's a great public health achievement, but it has also created a generation of 'cultural refugees' pushed out of the workforce before they are ready. Marilyn King, a volunteer and advocate, has started not-for-profit Willing Older Workers (W.O.W!) to help people over 50 who are struggling to find work.

The charity started out of necessity. After being made redundant at 61, her husband Howard struggled to find work, despite 40 years as a mechanical fitter. He was too old to even get an interview, he says. Depression followed, the bills stacked up and Marilyn was convinced they would lose their home. Then Howard told her he had great news. "I honestly thought he was going to tell me he'd had a response to a job application, but he said, 'I just found out my life insurance policy pays out on suicide,'" she recalls with a wry smile, sitting in the small W.O.W! offices in Melbourne's inner west.

She sent out a survey to see if other older people were struggling to find work. The result was overwhelming – people wrote back admitting they had considered suicide, lost their home or could only afford one meal a day. "I read some of the responses out to Howard," she says. "And he looked at me calmly and just said: 'We've got to help these old buggers.'"

They started with a morning tea and, two years on, W.O.W! provides weekly support to many families across Melbourne. They also help members across Australia with resumes, job applications, networking and advocacy. Marilyn believes about 30 members have found work.

It's the first organisation of its kind in Australia and probably won't be the last – by 2050 just 2.7 people will be working to support every person aged over 65 and by 2056, a quarter of Australians will be 65-plus. And with many people now willing and able to work into their 70s, it's clear something has to shift.

Susan Ryan, Age Discrimination Commissioner at the Australian Human Rights Commission, believes ageism is stopping our youth-focused economy from recognising the trend.



▲ **New lease on life.** Marilyn King helps the elderly participate in the economy through her Willing Older Workers initiative.

To fight that, she's commissioned research that shows older people aren't more likely to take sick days or have accidents and can be retrained in new skills and technologies. "Australian employers need to understand if they want their business to grow in the future they can't ignore the roughly 2 million people aged over 55 in the population."

The rest of us will be forced to reconsider our concept of the elderly and develop ways to embrace their wisdom, skills and experience.

Marilyn is lobbying the government to set up a system in which older people job share with young trainees so they can learn from each other. Although progress is slow, more businesses are using W.O.W!'s database, seeking more experienced, mature workers.

It couldn't come soon enough, as Marilyn has plenty still to contribute herself. While running W.O.W!, she's been studying filmmaking and is planning to move to Bulgaria with Howard to teach English and make documentaries. ▶

STATISTICS: AUSTRALIAN TREASURY (2010); AUSTRALIAN BUREAU OF STATISTICS (2008); AUSTRALIAN GOVERNMENT (2010); NATIONAL SENIORS AUSTRALIA (2010); RICE WARNER ACTUARIES (2011); CONSTABLE, LOCAL GOVERNMENT RESEARCH AND DEVELOPMENT SCHEME (2003).

The gap between what the average Australian has when they retire and what they need to live comfortably is **\$79,200.**

22% of the world's population will be aged over 65 by 2056.

63% of workers over the age of 45 say employees should remain in full-time work until they are 70 years old.

By **2050**, life expectancy at birth is expected to increase to

87.7 FOR MEN
and
90.5 FOR WOMEN

Australian health spending will grow from **4%** of GDP to **7.1%** by 2050.

More than
1 BILLION
people in Asia will move out of poverty and into the US\$6,000–\$30,000 earning bracket over the next decade.

By
2030
the bulk of global GDP will be generated from non OECD countries.

In China, the growth of GDP has almost tripled in the past **two decades**.

The total value of trade between China and Australia grows an average of

22%

per year.

Since the early '90s, global trademarks held by Chinese residents have increased from **5.9% to 31.7%**.

Between the early '90s and 2000s, the foreign exchange and gold reserves of China increased from **2.7% to 21.9%** of the global share.

The economy of developing Asia is growing around

8%

each year.

THE SILK HIGHWAY

In the next 20 years the world's economy will continue to switch its focus from the West to the East, and Australians are well placed to benefit from this shift.

MICHELLE GARNAUT never intended to be a trendsetter. Over the noise of clattering crockery in her busy restaurant in Beijing, she explains how she went to Hong Kong for a visit in 1984 and stayed for good. In 1989 she opened a restaurant there, M at the Fringe – unexpected, given she had planned on making her mark in Europe's food capitals.

"After spending six months over there, I realised the opportunities were in Asia," she says. "There were lots of questions over my decision to work in Hong Kong but to me it felt like anything seemed possible in a growing economy." M at the Fringe was hugely successful because of its elegant Western fare and Michelle was urged to open one in New York or London. But she felt her place was in Asia, unaware the rest of the world would soon think the same way.

"I think I was just in the right place at the right time with the right idea," says Michelle, originally from Melbourne. In 1999 she opened M on the Bund in Shanghai. In 2006, inspired by the city's growth, a bar joined it and she has since founded the Shanghai Literary Festival. Her latest restaurant, the lauded Capital M in Beijing, opened in 2009.

Her success comes on the back of Asia's growth. In 1980 the geographic centre of the world's economy (calculated by measuring GDP across 700 locations) hovered over the Atlantic Ocean, between Europe and the USA. Academics predict that by 2030 it will lie somewhere between China and India.

Shiro Armstrong, a research fellow at the ANU's College of Asia and the Pacific, says this growth has prompted selling to Asia and will profoundly change the way Australians work, study and live, forcing us to learn more about Asian society. "Exporting more to Asia and creating products that cater to [its people] is only a narrow part of the story," he says. "Individuals, workers, companies and societies need to gain a better understanding of the peoples, cultures and institutions. Language training is only the start."

Michelle says the task isn't simple. "Many people think the population is so big they will surely find a market for their product. But they don't know the language or the culture."



▲ **Ahead of the curve.** Originally from Melbourne, Michelle Garnaut is a restaurateur and philanthropist who now lives in Beijing. She is also the founder of the Shanghai Literary Festival.



▲ **Right on the money.** From the rooftop of M on the Bund, dinners can enjoy the view of the Shanghai skyline. Created by Michelle in 1999, the restaurant has become a city icon.

Her success has been hard work, she says. "I've worked in Asia for 30 years now and I've constantly had to change and evolve to keep up with the rapidly shifting economy. Our whole model is built on being the place where things are happening with good food and good wine, so we need to stay on top of what's going on." In a changing world, if you stop moving for too long, you'll sink; success lies in knowing in which direction to steer. ▶

IMAGES COURTESY M AT THE FRINGE; STATISTICS: INTERNATIONAL MONETARY FUND (2012); ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (2010); WILSON ET AL., BRICS MONTHLY (2010); AUSTRALIAN BUREAU OF STATISTICS (2009).

GOING, GOING, GONE

Habitats and species are being pushed to extinction; the coming decades will require a greater focus on the environment to save what's left of our biodiversity.

THE SENIOR CUSTODIAN of the Djok clan and a Kakadu ranger, Jeffrey Lee, could have sold his family's land to a uranium mining company and pocketed \$5 billion. Instead, he spent two decades fighting to have the traditional lands of Koongarra – a 1228ha piece of untouched Northern Territory bush – World Heritage listed, by having it incorporated into Kakadu National Park. His dream was realised in February 2013.

While passing up such wealth may seem mind-boggling – and it was for some of his family – Jeffrey could also be considered a hero. After all, the ground will always have mineral value, but once such a pristine habitat is dug up it can never be replaced.

Sitting atop an outcrop of red and purple rock on the edge of Koongarra's savannah woodlands, Jeffrey explains that protecting wildlife and the traditional culture of his people is of far more importance to him. "Money comes and goes. You can always make money other ways, like with visitors, but you can't replace that land," he says.

His family has lived off Koongarra (which is closed to the public) for tens of thousands of years, carefully maintaining the balance of give and take. It stretches to the Arnhem Land escarpment on the east and is home to sacred burial sites and rock art.

Professor Hugh Possingham, an ecologist at the University of Queensland, believes Jeffrey's decision is one more people need to make. "If we keep doing what we're doing, over the next 100 years we'll lose half the species in Australia," he says, adding that indigenous management techniques are the way to preserve what remains. "If we don't start to realise the value of land – the real value of land – future generations will look back and ask why, for lack of a tiny amount of funding, we couldn't be bothered to save those species."

CSIRO's Stefan Hajkowitz believes this mega-trend will influence almost all the decisions we make in the future – from what we plant in our garden and what we eat to where roads are built. "Right now humans are doing more to protect species and habitats than we've ever witnessed in the past. Having people like Jeffrey stand up and put a value on land



▲ **Location, location, location.** Jeffrey Lee, senior custodian of the Djok clan has incorporated Koongarra's savannah woodlands into Kakadu National Park.



▲ **Beauty from above.** Jeffrey's battle to save Koongarra from uranium mining was won in February of this year.

over money is a huge step forward," he says.

Jeffrey now wants to build an out-station where he can teach how to manage the land, hunt and gather bush tucker. "It's a living culture and I want to make sure my nieces and nephews are aware of that. That way I know the land will be looked after forever." AG

🔍 **FIND** the CSIRO report *Our Future Worlds: Global mega-trends that will change the way we live* at: www.csiro.au/Portals/Partner/Futures/Our-Future-World.aspx

STATISTICS: IUCN; SECRETARIAT OF THE CONVENTION ON BIOLOGICAL DIVERSITY (2010); BALINT ET AL., NATURE CLIMATE CHANGE (2011); PURVIS ET AL., BIOSSEAYS (2000); COSTELLO ET AL., SCIENCE (2013)

70% of the world's plants are currently threatened with extinction.

210,000sq.km of land has been protected around the world since 2002.

ONLY 1.5 MILLION of Earth's estimated 5 million species have been formally described.

1/3 of all species could become extinct if climate change continues as predicted.

80% of all genetic diversity could be lost along with those species.