

BEYOND DROUGHT

HOW THE COUNTRY IS FIGHTING BACK FROM THE DECADE-LONG BIG DRY.

BY GRETEL SNEATH

Farmer Chris Grove surveys his best wheat crop since 1998 on his farm "Glenwyck" near Cowra, NSW.

FAIRFAXPHOTOS



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Former New South Wales Premier Kristina Keneally speaks to Stuart Tombs (left) and his father Richard at the family property "Bargibal" at Bundarra, one of the last places to come out of drought. RIGHT: Staff yard sheep at The Big Woolshed on Reola Station near Broken Hill, NSW.

SHEEP NUMBERS at Reola Station, 380 kilometres north of Broken Hill, NSW, are higher than ever. "It's really like they have put in a good effort after the drought – it's as though the country is feeling better after a big, long spell," owner Tony Brown says. "And it's the same with the wildlife; every little bird and snake and lizard and 'roo has bred like mad to its heart's content the last two or three years. Everything seems to be going again."

Australia is officially drought-free for the first time in more than a decade. The Federal Government made the call in April, when Exceptional Circumstances (EC) funding ended in the last of the needy towns, Bundarra and Eurobodalla, in eastern New South Wales.

"The extended period of drought, which made things tough for many on the land, is finally over," Agriculture Minister Joe Ludwig said in a statement. "The improvement in seasonal conditions is very encouraging for farmers and their families, and the outlook for agriculture is favourable."

Uralla Shire mayor Isabel Strutt saw Bundarra at its worst. She says the fact that the area is now considered out of danger is reassuring, but she remains wary. "There is a sense of relief that it's over, but always people are worrying about the next one," Isabel says. "Drought is part of Australian life; you never quite know when it's going to set in, how long it's going to last or how severe it's going to be."

Farmer Fergus Thomson, the mayor of Eurobodalla Shire, says there has been no dancing in the streets in his patch either; it is more a case of 'on with the job'. "We've had good rainfall and good crops for a while, and have really enjoyed the good seasons that we've been able to string together since, but I think that you never recover from drought to an extent – you have to rebuild a herd and run up a lot of expenses surviving it, which puts you behind for many years," he says.

Since 2001, the government has provided \$4.5 billion in EC relief payments and interest-rate subsidies to drought-affected farmers and small businesses. The money was meant to help recipients meet

TODD MURPHY



“It’s as though the country is feeling better after a big, long spell.”



TODD MURPHY

Reola Station's Brown family (l-r): Tammy, Sarah, 9, Tom, 7, William, 2, Abby, 5, and Tony. BELOW: National Farmers' Federation vice-president Duncan Fraser.



everyday living expenses as opposed to recouping losses, which are almost impossible to quantify. “As we always tell the government, when the rains come, it doesn't mean the problems end,” National Farmers' Federation (NFF) vice-president Duncan Fraser says. “You still have that issue of paying off your debts from the drought and you may still not have income flowing in. The end of the drought isn't the end of the pain, that's for sure.”

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) says the average financial performance per broadacre farm plummeted from \$134,000 in 2001-02 to \$34,000 in 2006-07. The figure is slowly gaining ground, despite another significant trough in 2009-10.

“The rain certainly helps but it doesn't fix every problem; if anything, it's harder for people now,” FarmLink project coordinator Meg Perceval says. “There might be a perception in urban areas that everything is going to be okay, but out here some people are doing it tougher than they ever have, and it is very much ongoing. There's more farm-debt mediation happening here than ever before; financial losses from the drought combined with a stalled property market and the global financial crisis have created some pretty serious situations out there.”

Meg's work is funded under the National Suicide Prevention Strategy through the University of Newcastle's Centre for Rural and Remote Mental Health. The centre has been investigating the impact of exposure to prolonged drought in country communities over the past decade, and researchers are trying to fill some of the knowledge gaps. “Natural disaster-related research tends to focus on acute events such as floods, fire and earthquakes, which have an ‘end point’ and, therefore, a recovery phase, whereas the drought is an ongoing or chronic disaster with continuing environmental adversity and all that that brings,” Meg says.

HOW WE COVERED A DECADE OF DROUGHT

Drought has been a fact of life in Australia for almost all of **OUTBACK's** existence. The magazine was launched in 1998 and the country spiralled into drought approximately four years later. However, we've always chosen to take a positive look at rural and regional Australia and, of course, even during a decade of drought, there were plenty of great people doing remarkable things.

While drought formed the backdrop to many of the people and places we were writing about, we steered away from the doom and gloom reported in much of the mainstream media. However, in the December-January 2002/03 issue, publisher Paul Myers wrote, under the heading ‘Time to lend a hand’, that “a very large number of Australians are hurting and desperately need assistance”.

Reflecting **OUTBACK's** belief that the people of the bush will always find opportunity in adversity, in the December-January 2005/06 edition editor Mark Muller wrote: “Despite the hardships of life in the bush – hardships brought very much to the fore through the drought that has gripped much of the country in recent years – there is a vigour to our people that is both humbling and admirable.”

In October-November 2006 the dramatic cover picture of a jug of water sitting on cracked earth brought ‘Our precious water’ into focus with an in-depth feature on the critical water-management issues facing rural Australia. The following year, in the story ‘A right to water’, we looked at the Federal Government's addressing of over-allocations and a promised \$5.9 billion infrastructure upgrade.

By 2007 the term ‘climate change’ had become part of the country's lexicon and our June-July issue contained a special report on changes in our long-term weather patterns – including less reliable rainfall – and how rural communities were responding to this threat.

The following year **OUTBACK** published a spectacular photo essay on the work of a group of photographers moved to capture the drought. Their project, called *Beyond Reasonable Drought*, brought home the reality of a parched land to people cushioned by Australia's cities.

In 2009 the drought continued unabated. Our cover story ‘Water: A new reality’ reported that Australians had adapted to using less water but that many more changes were needed to save our rivers and groundwater and the communities that depended on them.

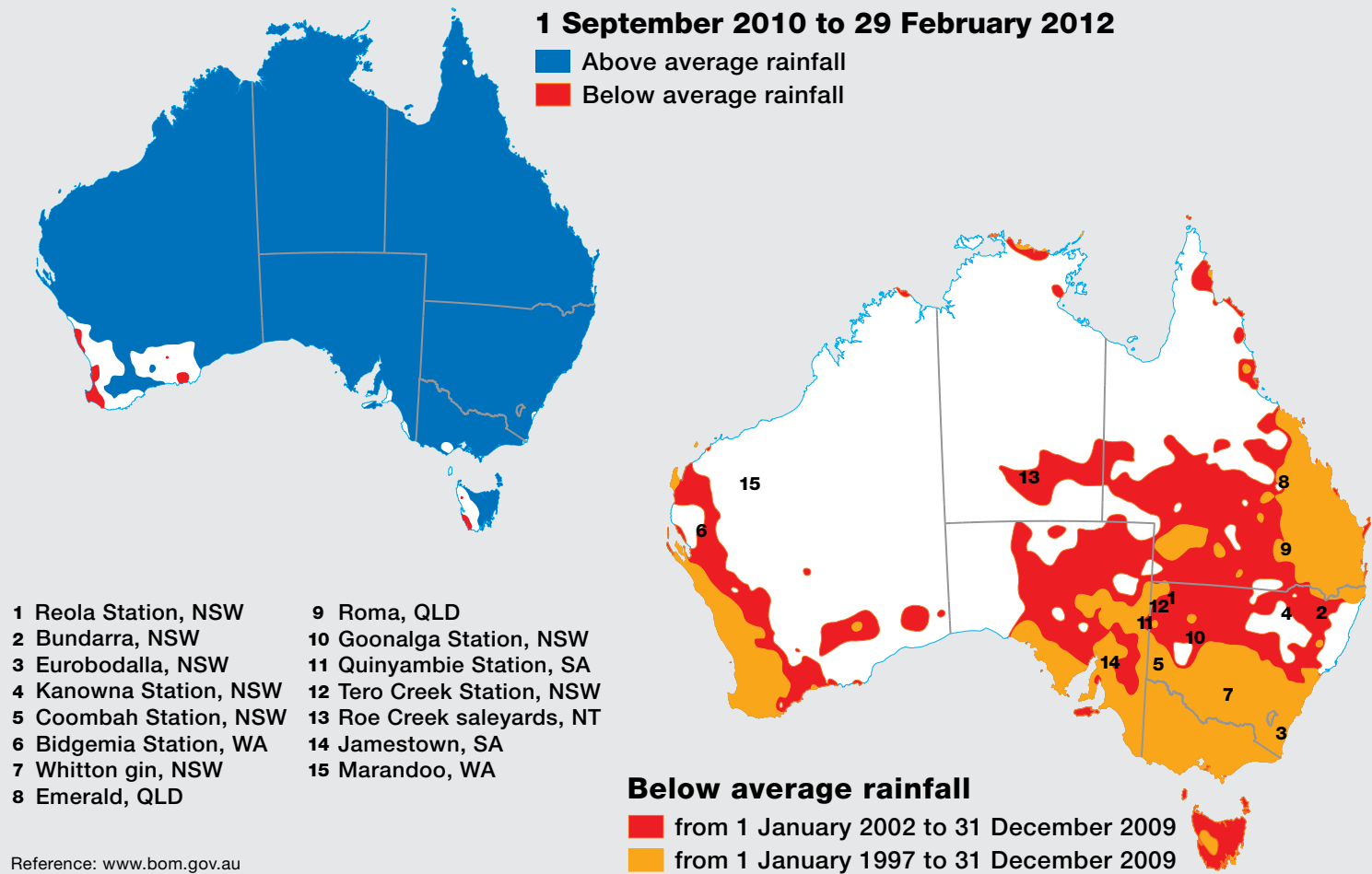
Also that year another cover story, ‘Living with drought’, acknowledged that the current drought was Australia's worst in recorded history and that it continued to exact a devastating toll. Even so, while soils were parched, innovation and enthusiasm still thrived.

In more recent years many of the responses to drought have focused on the Murray-Darling Basin. In 2010 our major feature ‘Saving the Murray’ reported that drought, water extractions and climate change had threatened the future of Australia's greatest river as governments worked to strike a balance between the millions of people who depended on it and the environment. This ‘rescue plan’ was further detailed in the December-January 2010/11 issue when vocal farmers had their say on the future of water management in the basin, which included proposed irrigation entitlement cuts of 3000–4000 gigalitres a year.

Most recently, in April-May of this year, the weather and its effects took centrestage in **OUTBACK** again, with droughts and floods unquestionably the biggest challenge for Australia's rural producers. Despite state-of-the-art forecasting, Mother Nature always has a surprise in store.

This story looks beyond the decade-long drought, which officially ended in April when the Federal Government ceased Exceptional Circumstances funding in eastern New South Wales.





NOT A SINGLE DROUGHT

The Bureau of Meteorology says the ‘decade-long drought’ tag is misleading. “There is a perception that we had a single drought, but the story is not that simple,” says Dr David Jones, head of climate monitoring and prediction at the National Climate Centre. “It was a series of slightly different droughts that started at slightly different times, which broke spectacularly with the 2010-11 La Niña event.”

Over the 10-year period, rainfall deficits were most acute in the south-east and the south-west of the nation, with shorter-term droughts in other parts of eastern Australia.

“In the south-west, these are an extension of a downward trend in rainfall, which has been present since around 1970. The drought hasn’t finished here and it’s probably wrong to call it a drought; it is more a case of increasing aridity or

desertification,” David says.

In the south-east, focused on Victoria, the drought began in late 1996, while the drought in the Murray-Darling Basin largely developed with the 2002 El Niño event. Several rainfall factors led to the prolonged dry conditions and water shortages: an absence of wet years, a lack of sustained wet periods, and a systematic reduction in autumn and winter rainfall.

When it did eventually rain, in the spring and summer of 2010, it poured. “It was without precedent, and a very unusual way to break a drought, but it is important to realise that the bulk of what fell was out-of-season summer rainfall generally associated with La Niña, rather than that delivered by winter-time cold fronts and storms,” David says.

Climate data from the Bureau of

Meteorology reveals a number of shifts in Australia’s rainfall patterns. Most dramatically, summer rainfall between the months of October and April (typically associated with thunderstorms, cyclones and the monsoon) has been increasing. At the same time, winter rainfall in southern Australia has been declining as winter-time fronts have contracted towards the south. In effect, as Australia has warmed over the past century, the climate has become more “tropical”.

“Attributing recent extreme events to climate change is a difficult, but emerging, part of the science,” says the manager of the Australian Bureau of Meteorology’s climate monitoring section, Karl Braganza. “It’s also an emerging piece of evidence: extreme climate events are increasing all over the world.”

In March 2012, the CSIRO and

the Bureau of Meteorology released an updated summary of Australia’s climate trends. *State of the Climate 2012* notes that warming trends observed around Australia are consistent with the global-scale warming measured during recent decades, despite 2010 and 2011 being the coolest years recorded in Australia since 2001, with the highest rainfall on record. Sea surface temperatures around Australia have also been the warmest on record over the past two years, and this can also be a key driver of above-average rainfall for Australia.

“Climate change is the elephant in the room and it’s just going to get bigger as the world continues to warm,” David Jones says. According to the report, the world’s 13 warmest years on record have all occurred in the past 15 years, while 2010 was the warmest year on record.



FELICITY MCLEOD

Lorraine Brand knows both types of disaster. “Floods are devastating – they come and take what they want and it’s done. But drought is like a cancer – it’s month after month, cow after cow, and it was like it was never going to end,” she says.

When Lorraine’s husband Robert began performing emergency caesarean sections in order to save the calves of dying mothers at their property “Kanowna” in Kenebri, NSW, the couple knew they had reached crisis point. They called in a financial counsellor to help them go through their expenses, and he suggested they cancel their sponsorship of a Guatemalan foster child in order to save an extra \$30 a month. Robert quipped that it was a pity people couldn’t foster their orphaned calves the same way – and the Foster a Calf program was born.

The project attracted widespread media attention and public support, and donations came from around the nation. One young child posted the Brands a drawing of a cow with 50-cent pieces stuck around the border.

“It was Foster a Calf, but it turned into Foster Robert and Lorraine, and people showered our family in love,” Lorraine says. Of the 100 calves that the Brands personally saved, 95 survived. Lorraine placed hessian bags over the youngest ones at night to keep them warm.

But their efforts weren’t enough to get them through the difficulties of 2004. When a short burst of rain finally came, the couple decided on a whim to put their property on the market, and an offer was made that same day. “We sold it rather than lose it, and we didn’t have much left over,” Lorraine says.

The Brands moved to Brisbane for the next three-and-a-half years, but missed their old life, and have since returned to live on a much smaller property in Kenebri. The prospect of large-scale farming is no longer an option – financially, physically or emotionally.



NEWSPIX

CLOCKWISE FROM TOP LEFT: FarmLink project coordinator Meg Perceval; Andy and Fiona McLeod with yarded goats on Coombah Station near Broken Hill, NSW; Lorraine and Robert Brand with one of the cows that benefitted from the Foster a Calf program.



WEATHERING THE STORM

For every story of despair, there is one of hope, of families able to dust off that relentless dirt and get on with farming. Andy and Fiona McLeod operate Coombah Station, 125km south of Broken Hill, NSW. At its peak, they ran 7000 sheep and several hundred head of cattle, but when the land began to dry up, they were forced to start selling.

“We agisted some of the cattle – they had more holidays than we did – before we ended up getting rid of the whole lot,” Andy says.

The sheep were next, and when the McLeods were down to 2000 breeding ewes, they needed a new income stream. Feral goats, which fetched just \$2 per head when they bought the property in 1979, had always been a side business. Suddenly, they became a key focus.

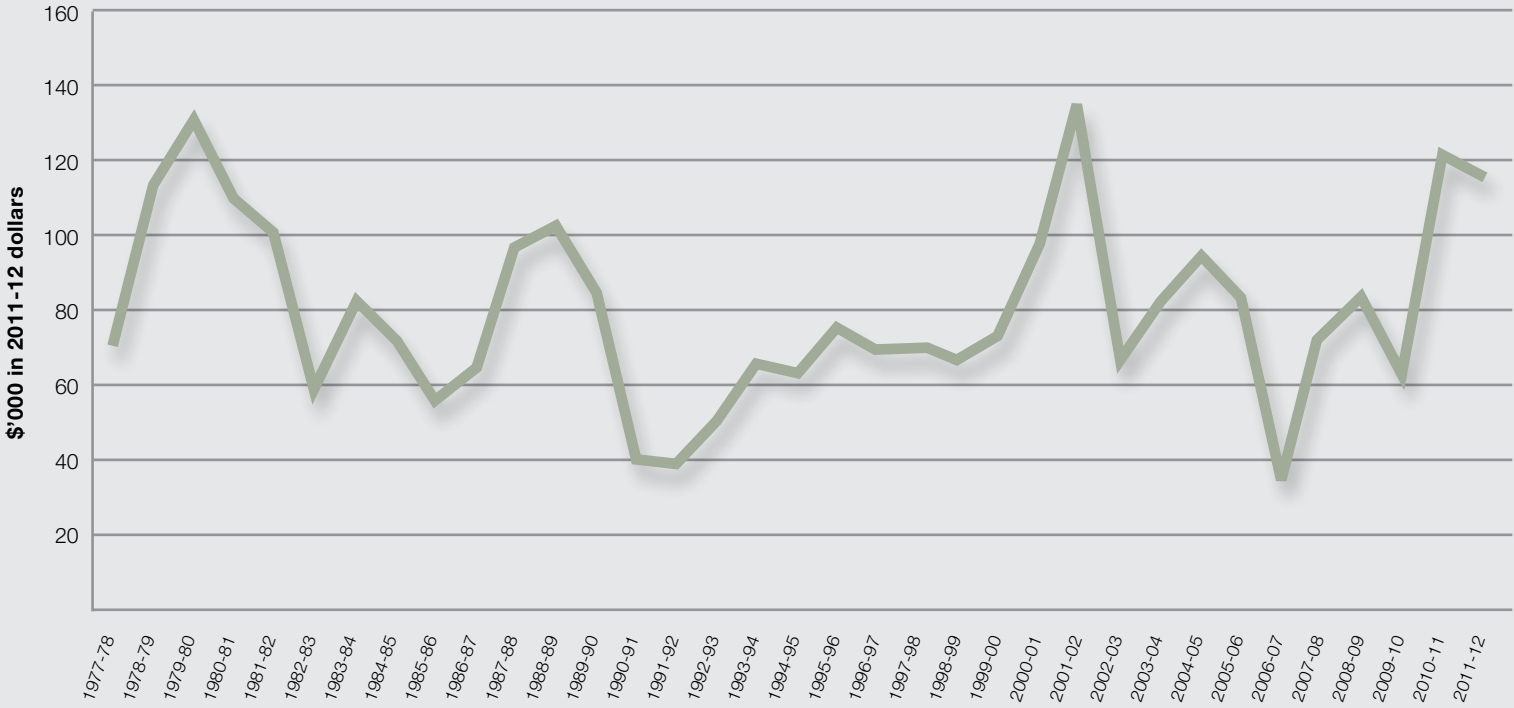
“I wouldn’t say that I was really affected emotionally during the drought – I just drank less and went out chasing more goats,” Andy says.

The efforts paid off. “Three years ago, and for the seven or eight years prior to that, our gross income from the goats was higher than wool, sheep and cattle combined,” Andy says. Today, feral-goat mustering continues to make up more than 50 percent of Coombah Station’s income and, depending on the season, Andy and Fiona can trade up to 10,000 head a year.

“They prefer rough, scrubby country and around a third of our property is suitable for goats and nothing else, so we’ve set up a lot of infrastructure, putting in paddocks and mustering yards,” Andy says. “Feral goats definitely aren’t out of control here – everyone’s on top of them in this country and, if it wasn’t for goats, half of the Western Division would probably have gone under.”

Darryl Fargher throws a shadow on the parched bed of Seven Mile Creek near Innamincka, SA, during the extended drought.

FINANCIAL PERFORMANCE OF BROADACRE FARMS



Source: ABARES Australian Agricultural and Grazing Industries Survey

Reola Station's Tony Brown agrees. "If you weren't living off the feral goats, you were being supplemented by them," he says. "The goats gave us that supply of money to survive off – they bred at their own opportunity and gradually built up during the brief rain periods."

Reola Station is a family business operated by Tony and wife Tammy, along with Tony's parents, Graham and Deidre. A traditional wool-growing enterprise, the property's 16-stand woolshed was once easily filled.

"2002 was about as bad as you'd want to see it here," Tony says. Stock numbers had to be dramatically cut from 38,000 sheep to about 6000, and 95% of them were sold. "We also lost some, which was pretty ordinary," he says. The following year, rainfall brought a welcome reprieve, but the Browns were reluctant to restock, as they knew the drought wasn't over.

It was time to rethink their business model and spread their risks in order to safeguard their land. "You look around and think, 'This is what we've had thrown at us, what can we do to help ourselves?'" Tony says. "We had to try to make money without stock." Feral-goat mustering was a part-solution, and the station also began to agist stock from other properties, weather permitting. Sheep and cattle were brought in from as far afield as Tasmania and southern Queensland.

"We're in the middle of nowhere, but central to everyone in that regard," Tony says. "We would take on stock while we had feed, and then once it ran out and started to get dry again, we would tell people to come and get them and shrink back to our nucleus stock until it started to rain again."

This pattern continued from 2003–2008 and it enabled the Browns to get by. "The last 10 years have been bad, but you know it's always going to get better; it's just a matter of waiting," Tony says. "There were days when we'd be driving around wondering what we were doing, but we would never walk away; there's nowhere to walk to – where would you go? I love it too much."

The Browns believe another drought could be only three or four years away – "It's just a matter of when" – and they hope diversification will ease future vulnerability. "We have learnt a lot, and instead of carrying all Merinos, we have also restocked with meat sheep like Dorpers, so the enterprise is now 50% meat sheep, 25% Merinos and 25% goats," Tony says.

PRAYERS ANSWERED

As Lachlan and Jane McTaggart sifted through the muddy debris inside their homestead after the severe floods of December 2010, they wondered if praying for rain had been such a good idea after all. They had just survived the two driest consecutive years on record at Bidgemia Station, about 160km east of Carnarvon on the banks of the Gascoyne River, WA. ►

Under the influence of the flooded Culgoa and Barwon river systems, one of the outback's most famous rivers, the mighty Darling, breaks its banks south-west of Bourke, NSW.

‘It was massive – a rain that we’ve never seen before ...’



JOSH SMITH

OUTBACK STORY

Then came the December 18 deluge.

“It was massive – a rain that we’ve never seen before – but I can’t tell you exactly how much fell because the rain gauge was one of the early casualties,” Lachlan says. The river swelled two metres beyond the highest point ever recorded, and when water levels inside the 130-year-old homestead reached the top of the doorframes, the couple, their son Hamish and his wife Jodie sought refuge in the “Starlight Motel”.

“We got on the roof to start with, because it’s a bloody sight bigger than two rainwater tanks, but we were only up there for about two minutes when we realised that we wouldn’t be able to hold on to the five dogs on that slope and would be better with a flat roof,” Lachlan says.

The moon was almost full that night and it became their saviour during the 12-hour wait for help to arrive. “If it had been pitch black, I think you would lose your orientation, and I reckon you would find it very hard to survive,” Lachlan says.

When daylight came, the magnitude of their losses became clear. “It was just an unbelievable mess; beyond belief,” Lachlan says. “When you mix mud brick with a lot of water, you don’t have mud brick any more, and some rooms in the house were waist-deep in mud.”

There were also heavy stock losses. “We lost a lot of cattle and spent a lot of dollars trying to survive the drought, but then we lost another big heap of cattle and, at this point, we’ve probably got half to two-thirds of the adult females we require to have a reasonable business,” Lachlan says.

Now father and son are trying to boost their income with off-farm work. “We’re not out of the woods yet, and I have to say that I’m acutely aware of financial ruin – that’s what worries me more than anything,” Lachlan says.

Since the start of April, coinciding with the end of the 2011-2012 La Niña, conditions have been dry again across large parts of the nation. Whenever the river does run, Lachlan finds himself looking over his shoulder, and there is always a sense of relief when the levels start to drop once more. It’s fair to say that his relationship with the mighty Gascoyne has cooled.

“Before, I couldn’t think of any place I’d rather be living than on the banks of a river with all of those beautiful big gum trees, but I’m not so fussed about it any more,” he says. “I reckon I could live a long way from a river. The drought ended the night it flooded, and we certainly learnt that night that you should be careful what you wish for.”

PAYDIRT IN THE PILBARA

A landmark agricultural project is aiming to drought-proof Western Australia’s Pilbara using surplus groundwater pumped from Rio Tinto’s Marandoo iron-ore mine. The Hamersley Agricultural Project, located approximately 30 kilometres north-west of Tom Price, will use water from the Marandoo below-water-table expansion to produce up to 30,000 tonnes of hay each year in an irrigated agriculture scheme.

“It’s mining and agriculture working together rather than diametrically opposite,” says Rio Tinto’s general manager of climate change, water and environment, Allan Jackson. Rhodes grass and forage oats are being cultivated within circular pivot cells, and the harvested crop will be cut and baled on a rotational basis. It should comfortably feed 25,000 head of cattle across six pastoral stations managed by Rio Tinto Iron Ore over 1.5 million hectares: “Karratha”, “Hamersley”, “Rocklea”, “Juna”, “Yalleen” and “Yarraloola”. As an additional drought-proofing measure, herds will be rationalised to focus on the resilient Droughtmasters rather than Brahman and Shorthorn breeds.

“We will be able to quarantine the cattle and feed them with reliable feed, which will improve their health and marketability – they won’t be roaming all over the properties, so we can reduce the total area grazed and effectively rest large areas that may be under pressure from grazing,” Allan says.

Any excess hay will be sold as feed to other pastoralists in the Pilbara. “We’re not out to make big profits – the primary purpose of this project is to optimise the use of water from dewatering the mines – but I’m sure we’ll have a fair bit leftover to sell, and the freight will work out cheaper, as a lot currently have to cart it up from the south,” he says.

Water will also be used to irrigate a seed bank, which is being planted to help rehabilitate the environment at the mine sites. “The entire project is very exciting,” Allan says. “It’s something that



Emma Lewis works the draft on Hamersley Station, WA.

we haven’t done before, and there has been a lot of interest within the mining industry and also internationally, and the West Australian Government has also been very positive about it.”

It is estimated up to 200 billion litres of surplus mine water will be

available each year in the Pilbara. By comparison, the horticulture district in Carnarvon uses about 10 to 12 billion litres a year.

“As iron-ore mining in the Pilbara continues into the future, agriculture provides a unique environmental solution to the predicted large

volumes of water to be discharged,” Western Australia’s Agriculture and Food Minister Terry Redman says. “The production prospects if such a large amount of water can be harnessed are enormous.”

Dewatering will begin at a second mine, Nammuldi-Silvergrass, to the

north-west of Marandoo, within the next year. Rio Tinto is planning to install an additional 30 pivots over 1000ha and, all going to plan, a further 20 at a later date. The company plans to experiment with standard grazing on that land, as opposed to cutting and baling.



SCOTT JENKIN

Martin Kitschke virtually lived on the road during the drought, delivering hay. OPPOSITE: Recovering nicely ... “Belowra”, which belongs to Eurobodalla mayor Fergus Thomson and his family.

A MOVEABLE FEAST

“There’s some great stories, and it really does highlight the innovation of farmers,” says the NFF’s Duncan Fraser, who owns and manages “Narringa”, a 10,000ha pastoral property near Hay in New South Wales’ Western Riverina. Duncan has witnessed first-hand the changing landscape caused by the big dry. “There’s now a cotton gin at Whitton, south of Griffith, and there’s a huge amount of cotton waiting to be ginned there, and some really good reports of crop yields,” he says. “So we’re now growing cotton from north of Emerald right down to the Riverina. We wouldn’t have heard of growing it that far south 10 years ago, but farmers are looking at diversifying.” Duncan says corporate properties owned by large pastoral companies spent millions during the drought hand-feeding stock and sending animals away on agistment. “A lot of these places have come onto the market now,” he says. “They have never really recovered from those costs.” Many of those who have managed to survive attribute their staying power to the stronger market. “What’s certainly true is that we’ve never experienced a drought of that length before, but what saved a lot of producers was the fact that at least the price of sheep meat, wool and beef remained high,” Duncan says. “Another benefit that our forebears didn’t have in the previous long droughts of the ’40s and last century was that they couldn’t easily move stock around; with modern transport, we can move stock quickly and easily.”

CHANGING FACE

The Agricultural Census compiled by the Australian Bureau of Statistics provides a snapshot of the changing face of agriculture during the drought. The 2005–06 survey found that there were an estimated 154,472 agricultural businesses, while 121,000 businesses reported agriculture as their main activity in 2010–11. Despite the dramatic decline, the difficulties faced by farmers in securing and retaining reliable workers remains an issue across the industry. National Farmers’ Federation vice-president Duncan Fraser says an estimated 80,000 semi-skilled jobs cannot be filled. “The drought tended to put a lid on it with farmers having to lay-off workers, but with the recovery, it has returned as a critical issue,” he says. The Seasonal Worker Program is a short-term solution for short-term labour relief in industries such as cane, cotton and horticulture that have been able to demonstrate that they can’t fill the jobs locally. But a more permanent solution is needed. Eurobodalla Shire mayor Fergus Thomson says the drought has proved a major deterrent for the younger generation contemplating life on the land. “So many young people watched their parents doing it so hard, and don’t want to go down that path, which is really sad,” he says. “We need to protect and encourage that generation of young farmers and provide them some assistance to get through.”





Enjoying the end of the drought in a dam on “Woodlands Park” at Iredale near Toowoomba, Qld: Ben Burgess, 5, Olivia Burgess, 7, Ruby Smith, 7, and Annabelle Burgess, 10.

You can also transport feed. During the drought, Martin Kitchke virtually lived on the road, delivering hay to the nation’s worst affected areas. From Roma in Queensland to New South Wales stations such as “Goonalga” and “Tero Creek”, “Quinyambie” in South Australia and up to the Roe Creek Saleyards in Alice Springs, Martin says he will never forget the sight of endless sand upon the horizon.

“Every time the wind blew, the sand drifted,” he says. “Driving to Tibooburra once, I had to pull up during a severe sandstorm because I couldn’t see, and I ended up wrecking the motor. That was the day Sydney got blacked out. I’ve seen troughs filled with so much sand that the ball float wouldn’t work, and bits of old machinery virtually buried – that’s how bad it was. Some tracks were under a foot of sand, and Tero Creek Station once had to drive a grader 60km to pull me out of a bog.”

Martin and his son Daniel have 5000ha of cropping and grazing land around Jamestown in South Australia’s Mid North. Their property has always supplied a large number of stations with hay to feed yarded sheep and cattle, but when the drought was on, it was different. “This was to keep them alive, and we were flat out,” Martin says.

He doesn’t dwell on the poor condition of some of the animals: “It wouldn’t be fair; everyone was doing the best that they could.” And despite the hardship, Martin was always greeted with “a smile and a feed”, filling him with admiration for those doing it tough. The interstate deliveries have slowed down now, and the Kitchkes are back to predominantly supplying fodder stores and yards. The sense of relief for everyone is palpable.

“I didn’t think it would be possible – not on some of those windswept paddocks,” Martin says. “But the land has miraculously come back from bare paddocks to feed.”