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Future
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Southern Rangelands Revitalisation Program

Harry & Alys McKeough at Carey Downs

Revitalising scalded floodplains with 'rangelands self-herding' and earthworks

August 2025

Acknowledgments

This case study was co-prepared by the Department of Primary and Regional Development (DPIRD) and Soils for Life as part of the Southern Rangelands Revitalisation Program (SRRP), jointly funded through the Australian Government's Future Drought Fund and the WA State Government's Climate Resilience Fund.

The program started in 2021 and aims to support pastoralists to investigate and implement long-term solutions for on-station improvements in rangeland condition, land productivity and livestock management in WA's southern rangelands.

We acknowledge that the contents of this document do not necessarily reflect the views of contributors.

Cover image: Paddock in bloom at Carey Downs
Images supplied by Harry McKeough

For further information, visit **dpird.wa.gov.au/southern-rangelands-revitalisation-program**

For more information on Soils for Life email **info@soilsforlife.org.au** or visit **soilsforlife.org.au**

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About the case study series

This case study is part of a series that showcases 7 pastoralists in Western Australia who have participated in the Southern Rangelands Revitalisation Program (SRRP) run through the WA Department of Primary Industries and Regional Development (DPIRD), funded by the Australian Government's Future Drought Fund – Resilient Soils and Landscape program and the WA State Government's Climate Resilience Fund.

The Southern Rangelands Revitalisation Program aims to support pastoralists to investigate and implement long-term solutions for on-station improvements to land condition and livestock profitability in WA's southern rangelands. This program takes a systems approach to rangelands revitalisation involving:

- the regeneration of palatable, productive, perennial vegetation
- landscape function and hydration restoration
- total grazing pressure control
- livestock management.

The program provides support to pastoralists to learn as a community through organised group meetings with like-minded pastoralists, funding to access expertise and training, and grant funding for revitalisation projects.

The 7 pastoralists in the case study series received training and specialist support in the first phase of the program and were then successful in applying for funding for an on-ground revitalisation project.

Soils for Life has prepared each case study in collaboration with DPIRD and the pastoralists. Each pastoralist story provides an insight into their unique rangeland environment and context, challenges and motivations, and ways they are adapting and innovating to build resilience. The case study has a focus on practices implemented through the SRRP, but provides context about each pastoralist's broader management approach.

Station facts

Location
Yinggarda Country, Gascoyne River, WA

Climate
Hot dry summer, mild winter

Average annual rainfall
200 mm[1]

Agro-ecological region
Arid[2]

Property size
179,000 ha

Elevation
150 m

Social structure
Family operated pastoral lease

Enterprise type
Droughtmaster cattle and tree carbon

Landscape
Mulga shrublands in the southern rangelands[3]

Soils
Undulating stony uplands, stony plains, hills and ranges on Gascoyne Complex granitic and sedimentary rocks with stony soils, red shallow loamy and sandy duplexes with red deep sandy duplexes and red shallow loams; Sandplains (with some dunes and hardpan wash plains) on Quaternary deposits over Cretaceous and Permian sedimentary rocks of the Carnarvon Basin with red deep sands and some red loamy earths.[3]

Land systems
Durlacher, Wooramel and Sandplain[4]

1 Sourced from pastoralist and **SILO**.
2 Agro-ecological region is determined according to **Outback Australia - the rangelands**. Extreme variability of rainfall is a defining feature of southern rangelands and has a significant impact on the challenges and solutions being explored in the SRRP.
3 Sourced from **Natural Resource Information, WA DPIRD**.
4 Land systems of the SRRP project area. Sourced from the Rangelands baseline surveys - Western Australia.

SRRP project highlights

Goals and approaches

- Building 100% groundcover and slowing the flow of water to keep it in the landscape for longer
- Scaling up ‘rangelands self-herding’ to enable more efficient movement of cattle around the landscape and allow for paddock rest and recovery
- Developing an evidence base for the productivity and landscape recovery potential of ‘rangelands self-herding’
- Repairing the scalded flood plains to allow for vegetation germination and retention

Practices implemented

- Built a 9,000 ha demonstration paddock to scale up ‘rangelands self-herding’ grazing management
- Implemented ‘rangelands self-herding’ using lick feeders filled with rolled lupins to attract cattle to specific grazing areas
- Purchased a walk-over weigher to measure the weight gain associated with ‘rangelands self-herding’
- Developed three rehabilitation sites (two within the demonstration paddock) with earthworks including ponding and grader banks
- Collected baseline data including photo points and plant counts on more than 5 monitoring sites in the demonstration paddock to track landscape recovery

Initial insights

- ‘Rangelands self-herding’ is working efficiently to move cattle around the landscape and to keep them away from the earthworks sites
- Earthworks are showing signs of collecting water in good rainfall, which in time is expected to trap seed and lead to higher rates of germination
- Value found in meeting other pastoralists in SRRP to share ideas and outcomes

> We get a lot more response out of rain these days than what we did back then.
>
> **Harry McKeough**

Meet Harry and Alys

Harry and Alys McKeough live on their station, Carey Downs, 100 km south of Gascoyne Junction, WA, with their 3 teenage children. With a goal to create a sustainable enterprise, they run approximately 1,500 droughtmaster cattle across the 179,000 ha property, part of which is included in a tree carbon project.

Harry is a seventh generation farmer and Alys is a self-proclaimed 'city girl', and following what Alys calls the typical 'nurse-meets-farmer' scenario, they got married and started farming a mix of sheep, cattle and cropping on 1,200 ha in Northam, WA. But soon after, Alys jokes, 'Harry had a midlife crisis and decided he wanted to buy a station, so here we are!'

They purchased Carey Downs in 2010 for what they thought was a relatively inexpensive price for the time. The property had been operating predominantly as a merino sheep enterprise (with a few cattle) since 1907. The region and the station were suffering from a long drought when they arrived, but it was clear when the drought broke 7 months later

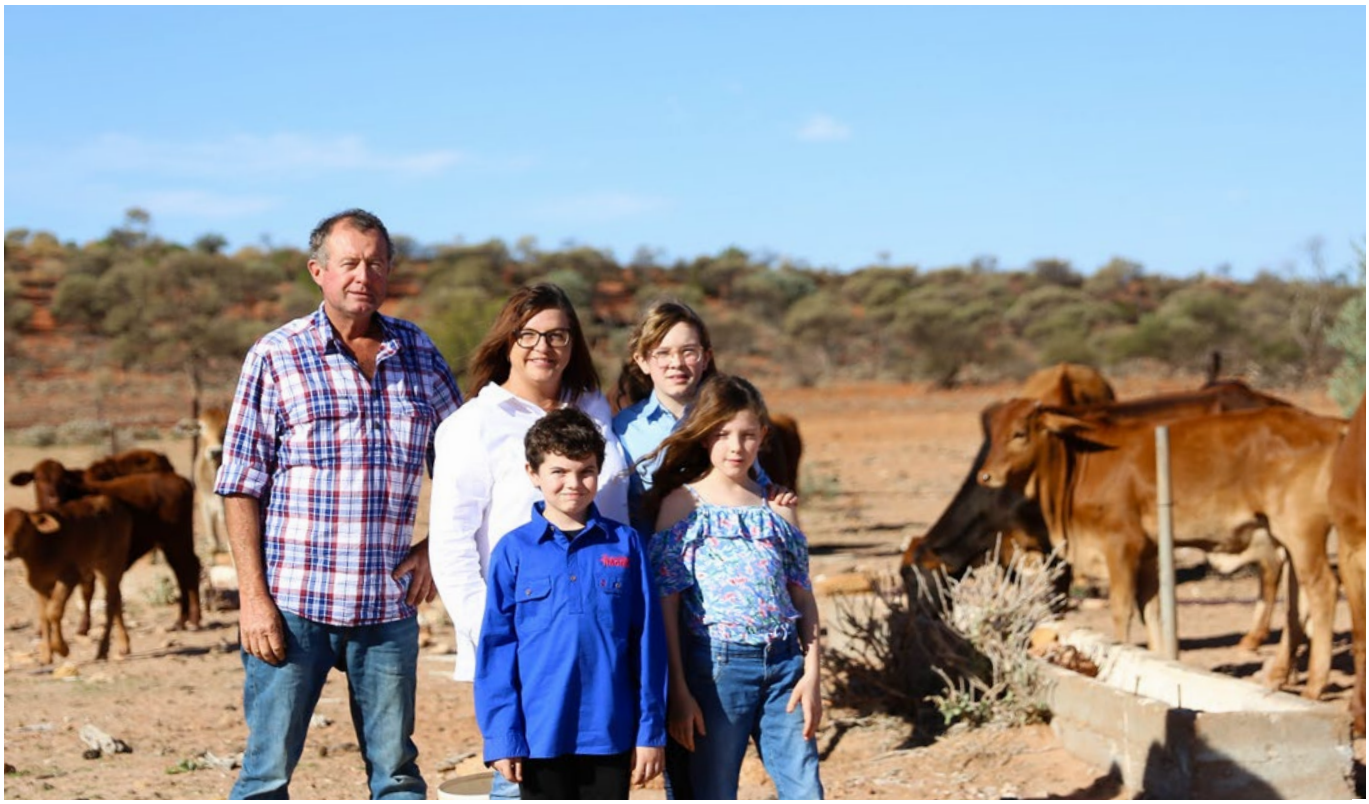


Image 1 Harry and Alys McKeough with their three children on Carey Downs

Source: Krystie Bremer

that climatic conditions were not the only reason the landscape was struggling. Harry says, 'When it rained, the response was pretty disappointing because it was a huge rain. The overgrazing by small stock had depleted the perennials and all the good plants were gone pretty much.' The McKeoughs attribute the poor condition of the landscape to a combination of the stock type and a century of unsustainable grazing practices.

Carey Downs is spread across 15 land systems, three of which fall in their SRRP project areas. The landscape contains undulating stony plains and hills as well as sandplains, containing a range of soils including red deep sands, red loamy earth and stony soils. With the station located in the mulga shrublands, common vegetation in the landscape includes mulga (*Acacia aneura*), bowgada (*Acacia ramulosa*), snakewood (Acacia xiphophylla) and gidgee (Acacia pruinocarpa), with grasses such as wanderrie grass (*Eriachne* spp.), bluebushes (*Maireana* spp.) and kangaroo grass (*Themeda triandra*).

Establishing a sustainable business

Harry and Alys started working together to repair the struggling landscape on Carey Downs from the moment they purchased the property. Their goal from the start was to revitalise the vegetation and turn their operation into 'a real sustainable business that can handle drought'. This meant that they needed to manage their operations so that the landscape is always improving and not degrading, while simultaneously managing to run a successful business that feeds their family.

Immediately after buying the station 'in the grips of drought', they trapped as many feral goats as they could, removed the feral cattle and started a new herd from the 50 cattle remaining on the property. They then started to convert the property from a sheep station to one that better supports running cattle. The existing infrastructure on the property was built for running sheep and was in poor condition, so the McKeoughs had to replace every trough with ones that were large enough for cattle, and they replaced some windmills with solar pumps, installed trap yards at all water points and built cattle yards at the homestead. It was a large outlay of capital, but Harry and Alys were confident that the conversion was critical to building a sustainable business.

Harry explains that the conversion to cattle was always the plan; given the degraded condition of the landscape, it was clear to him that running sheep in the region was unviable. He had also seen others struggling to run sheep for the past 20 years following the crash of the wool market. Harry is also not shy about his dislike for sheep after 'wasting the best years of my life trying to grow wool and remove wool from sheep'. Based on these observations and sentiments, he and Alys decided that working with cattle, which Alys also says are smarter, would better support their strategies for managing the station.

There were record floods 7 months after they purchased the property, after which Harry and Alys moved a droughtmaster stud of 25, plus 25 other cattle, up from their original farm in Northam and purchased 300 breeders and good herd bulls, and 'slowly bred ourselves up over 7 years'. They now have a core herd of about 700 breeding cattle, with up to 1,600 head of cattle at any given time. Harry and Alys say that the stable number of wild dogs[5] remaining on the property continue to keep down the small wild herbivores and have not caused much concern for them, with very few signs of predation on their cattle.

5 In WA, wild dogs are defined as dingoes, dingo/dog hybrids and feral domesticated dogs.

Building back landscape structure and function

It was pretty clear to Harry and Alys from the start that they needed to steer clear of the previous ways of managing the landscape, which was confirmed by the failure of vegetation to recover after the first rain event. The local landcare group was also very active at the time, so Harry and Alys were motivated to participate in their programs and secured some small grants to support a few landscape rehabilitation projects.

The McKeoughs have done a lot of earthworks and reseeding projects since they purchased Carey Downs, focusing on slowing the flow of water and maintaining moisture in the landscape with the hope that vegetation will begin to recover on its own over time. They have constructed ponding banks and leaky weirs, built whoa boys [6] on roads, scrub packed [7] and have harvested and planted native seed. One project they say they wouldn't do again is planting native vegetation tubestock because it's not cost effective. Harry says that when it comes to revitalising the landscape, 'We do a bit of something all the time.'

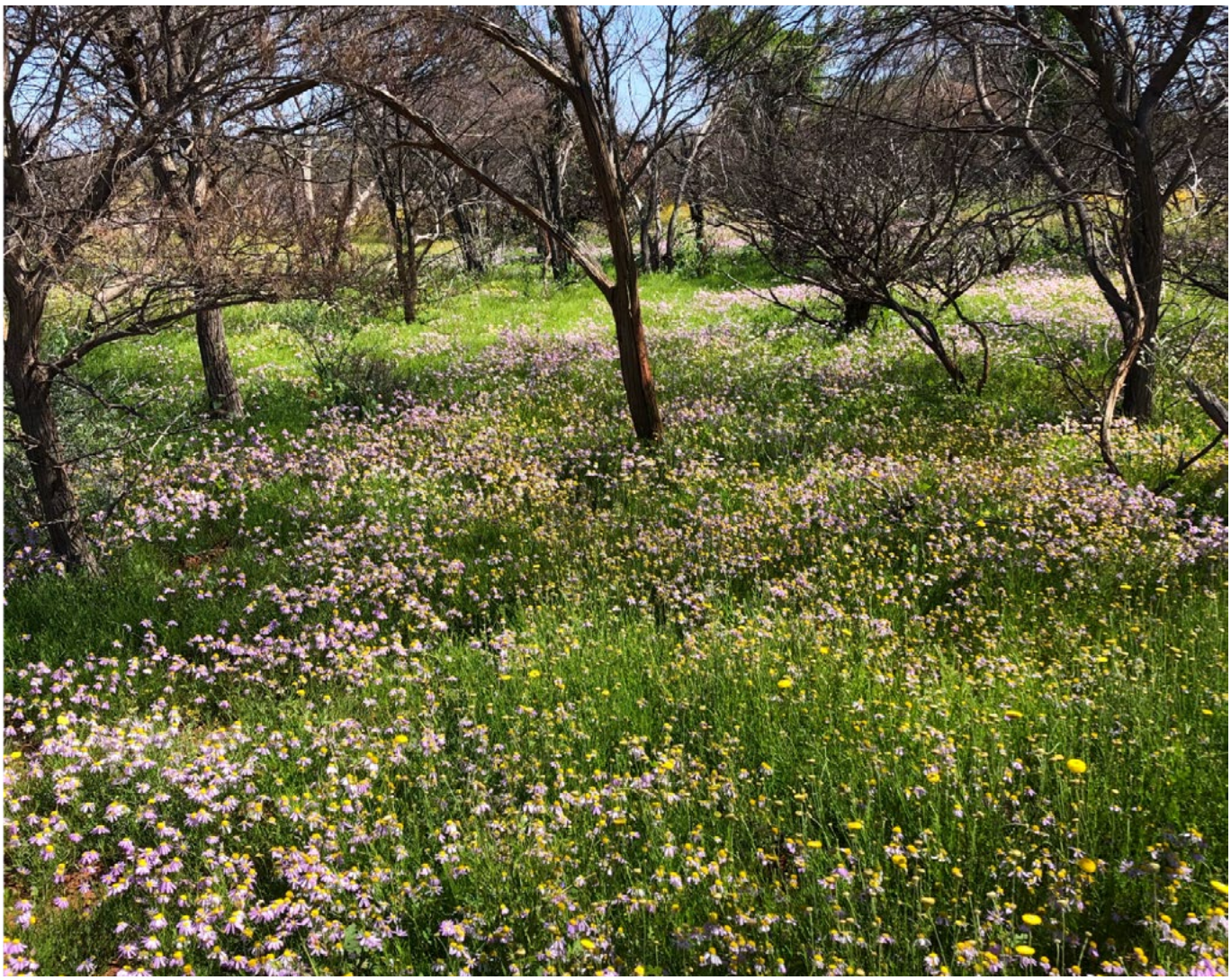


Image 2 Everlastings (Rhodanthe chlorocephala) in bloom after a good rainy season at Carey Downs

6 Whoa boys are dirt banks built at right angles across eroded tracks to divert water off the track without causing erosion and so vehicles can cross over them.

7 Scrub packing is the process of bundling woody scrub and laying it into a drainage line to slow the flow of water.

Developing new strategies for sustainable rangelands grazing

Working on 17 stations throughout the 1990s, Harry has also accumulated a wealth of knowledge on sustainable grazing on large stations in very dry conditions. Harry says, 'I sort of knew that even before we bought the station, I had ideas in my head of things that I could do. I worked on a lot of sheep stations as a young fella and saw a lot of bad management and a lot of good management and picked up a lot of alternative ideas.' This is where he developed his interest in using lick feeders for cattle, not only for its original purpose of improving weight gain, but also for the purpose of what he calls 'rangelands self-herding', where the lick feeders lure cattle to grazing areas that are strategically selected based on current conditions. The aim of 'rangelands self-herding' is to allow areas of a paddock to rest by keeping animals from grazing the entire paddock at once. As the lick feeder is moved around, the animals naturally move with it, moving to new pasture and leaving the previously grazed areas behind. Referring to his decision to implement 'rangelands self-herding', Harry says:

> 'I'd seen lick feeders with lupins work on cattle in the south and everybody does it with sheep, and I just never heard of anyone doing it in the rangelands. So we bought our first lick feeder before we even came to Carey Downs with the idea of trialling that anyway.'

Complemented by shutting down water points, Harry and Alys' method of 'rangelands self-herding' uses a lick feeder with rolled or cracked lupins as an attractant to encourage cattle to gradually move from one grazing area to another on their own. They have also used loose stock lick mineral supplements, which they sometimes still use, and have tried molasses in the past, which they decided was too expensive and messy. It can be difficult to manage grazing in unfenced country, and given Carey Downs does not have any fencing along its 250 km of boundaries and the McKeoughs have only fenced a quarter of the property into a few large paddocks, the benefit of 'rangelands self-herding' is that grazing areas can be rested without installing significant amounts of new fencing. This also means that Harry can move cattle between areas within one of his large paddocks, making sure the entire paddock isn't grazed all at once.

Once the cattle have moved to the area Harry is targeting, he is pretty happy with the way they naturally spread out their grazing. He estimates their grazing radius to be an average of 6 km from water, but this distance varies by individual and is dependent on weather, moisture availability of plants and individual animal factors such as lactation and pregnancy. Harry does note, however, that if there is a good rain with significant surface water, he'll 'have no control over the cattle really, which doesn't matter because they'll just scatter'. The cattle become more adventurous knowing there is moisture available elsewhere, but this doesn't worry him very much because plant growth tends to increase at the same time as the grazing pressure spreads more widely. They use conservative stocking rates and the moisture availability doesn't last for long, so the cattle will return to the target grazing area soon enough.

Harry says he has no set plans for moving the cattle between water points and that he 'just makes it up as we're going along', but Alys gives him much more credit: 'You don't make it up. You see the feed on offer all the time and use that to make decisions.' Regardless, it's clear that their grazing strategy reflects the adaptive nature of their landscape management. Rather than creating a plan

and sticking to it regardless of the conditions, Harry and Alys make sure that they modify the movement of the cattle across Carey Downs based on the condition of the landscape. They prefer visual observation of feed because although they like the idea of satellite data, they feel that it's currently still too inaccurate for their property, especially in areas with a significant tree canopy.

As a supplementary feed, the lupins in the lick feeders also bolster the nutritional intake of cattle, 'bringing those out-of-spec cattle up to spec', which not only yields higher weights, but also a higher price per kg for older cows in particular. Harry and Alys think there is a real economic advantage of this approach, but there is a balance of how many cattle you can put on the feeders because it is not economically viable to feed the entire mob. At this point, they only use lupins in their 'rangelands self-herding' feeders for underweight sale cattle, which they limit to a duration of approximately 3 months. They implement 'rangelands self-herding' to manage the rest of their herd across the station as well, but only use loose mineral mix in the feeder because they are not looking for the weight gain benefits and need to ensure economic viability of the practice. Harry notes that in combination with turning off water points, 'rangelands self-herding' without lupins is still an effective, albeit a bit less controlled, method for managing grazing pressure across the unfenced landscape.

Another one of their main strategies to protect their landscape from overgrazing and allow vegetation the chance to establish, is to always use conservative stocking rates. Harry explains that it is ideal to have fewer cattle to the extent that the finances of the business allow because 'you get more of a chance to match your stocking rate to the carrying capacity. So instead of 700 breeders, if you had a core of 500 breeders, you could hold them through the crook seasons. And then when you had a good run, just go out and buy a couple of hundred to bolster things up and make use of the food you got.' In other words, having a conservative stocking rate allows Harry and Alys to better adapt the grazing to the changing landscape conditions.

Breeding native-born cattle

With a core herd of 700, Harry says he would like to reduce the size of his breeding herd further to reduce grazing pressure and increase their capacity to graze cattle for trading, but the challenge is the lack of boundary fences. 'In an ideal world,' Harry says, 'we'd…perhaps trade a few cattle. But having no boundary fence doesn't really give us the option to trade cattle at all because they'll escape.' Harry has chatted with neighbours about potentially installing boundary fences, so it's still on the cards for the future. But until then, Harry and Alys make sure that all cattle on the property are born on Carey Downs so they can inherit the knowledge of the landscape and stay within its bounds.

> In this landscape, the cattle's knowledge of the country is just like gold to us.
>
> **Harry McKeough**

Maintaining a herd of native-born cattle also helps with the climatic conditions, which 'can be a bit difficult most of the time'. Harry says, 'When we first came here and we bought in cattle from elsewhere, those cattle really struggled when things got tough because they just didn't know the place because they weren't born here.' The McKeoughs have selectively bred their herd for drought resilience, and now 'the cattle know what to eat and where to go', which contributes significantly to managing the main challenges of maintaining a large station in the rangelands.

Southern Rangelands Revitalisation Project on Carey Downs Station

The Southern Rangelands Revitalisation Program (SRRP) aims to support pastoralists to investigate and implement long-term solutions for on-station improvements to land condition and livestock profitability in WA's southern rangelands.

Motivations and goals

Harry and Alys's revitalisation vision is to: 'improve rangeland condition to a level that enables us to maintain production in terms of kg/ha at a stable stocking rate that can carry cattle through drier periods whilst maintaining and improving our natural capital.'

As part of the SRRP, Harry and Alys wanted to establish a new paddock to gather evidence on the effectiveness of their 'rangelands self-herding' technique on landscape repair and cattle productivity and to implement earthworks across three rehabilitation sites identified in an Ecologically Sustainable Rangeland Management (ESRM) plan developed with landscape ecologist Richard Marver. Their goal is to revitalise the degraded floodplain and demonstrate how to scale up 'rangelands self-herding' to help repair the rest of their station, ultimately increasing the resilience of their rangelands property and sustainability of their business.

The McKeoughs also wanted to participate in the SRRP to connect with other pastoralists, as they 'were always keen to be part of a grower group of sorts'. It was also very helpful to receive funding to get some of the projects they had in mind up and running; while they had already started using the lick feeder, they used the SRRP funding to purchase the equipment needed to develop a stronger evidence base for 'rangelands self-herding', such as a more efficient roller mill and a walk-over weigher for the cattle.

A main priority for Harry and Alys is to improve the groundcover at Carey Downs because, Harry says:

> 'There's so much bare country, even in the better areas…You go out fencing in summertime in some of the sand plains here and you dig down into wet soil but then there's nothing growing on it. It feels like such a waste. We hope to see, you know, 100% ground cover, especially on that flood country.'

They are also actively working to slow the flow of water across the station, because even though they've 'seen water there at times just creeping across the landscape, just so slowly and just absolutely beautiful, nothing grows like it should'. By getting to 100% groundcover, especially on floodplain country, Harry and Alys hope to regenerate productive vegetation, re-establish the seed bank and, in turn, improve their landscape's drought resilience, productivity and carrying capacity.

Practices implemented

Construction of fenced demonstration site

Harry and Alys have constructed a 9,000 ha paddock using 30 km of either 5- (2 hot, 3 earth) or 8-wire (3 hot, 5 earth) Westonfence electric fencing powered by two solar-powered energisers. The 8-wire fencing targeted some higher value areas where they are considering exclusion fencing in the future. The purpose of the new paddock was to create a demonstration site where they have a controlled environment to implement their 'rangelands self-herding' technique and monitor the results on both the cattle and the landscape. They chose the area of the paddock for two reasons: it contains a scalded flood plain that they have identified as having high grazing value if rehabilitated and it was adjacent to 2 other paddocks, which reduced the new fencing required by half. The paddock contains 6 water points, each of which is located within a new or renovated trap yard.

Aligning with Harry and Alys's existing approach at their 19 other trap yards on Carey Downs, each trap yard contains a seed nursery within a small holding paddock irrigated with the tank overflow. They harvest perennial grass seed on the property and hand spread the seed in the holding paddocks with the hope that they will germinate. They have chosen to use the holding paddocks as nursery sites because they are only grazed once or twice a year when mustering, and Harry has found that this 'pulse grazing'

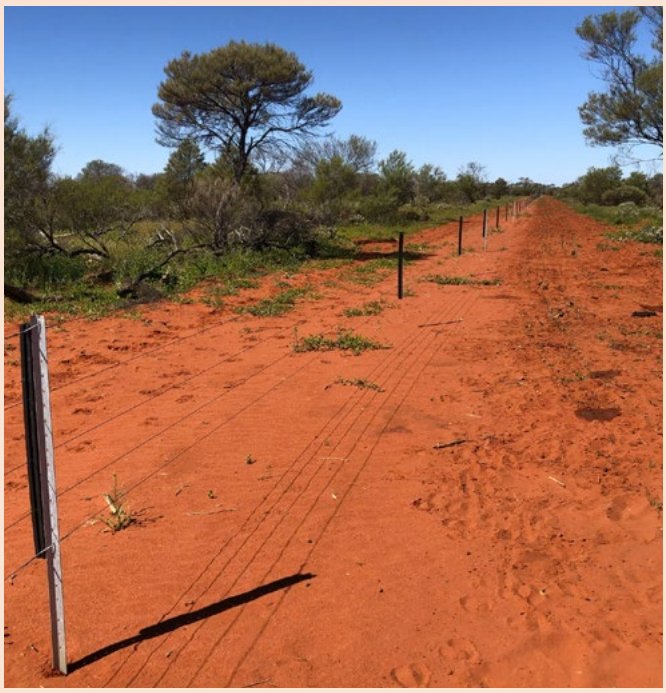


Image 3 Westonfence 5-wire electric fencing (pictured here) and 8-strand electric fencing was used to fence off the 9,000 ha demonstration paddock

Image 4 Trap yards surround every water point on Carey Downs, including those in the new demonstration paddock

has been a good approach to get plants to establish. At the moment they are focusing on establishing kangaroo grass (*T. triandra*), which Harry says was a staple grass in the area until the 1930s and now only grows in a few isolated pockets across the station. The wild kangaroo grass does well despite being far away from water, but even with the overflow irrigation in the holding paddocks, Harry admits that he has struggled to get the hand-seeded kangaroo grass established. He is not too concerned, however, because other species have established in those paddocks.

Scaling up and developing an evidence base for 'rangelands self-herding'

Harry and Alys are using the new demonstration paddock to measure impact of their 'rangelands self-herding' approach on cattle weight gain and landscape recovery.

Harry approximates the amount of rolled lupins needed to feed the ~140 sale cattle in the paddock at 1–1.5 kg/head/day, which he says is enough for the cattle to pick up approximately 0.5 kg of extra weight gain per day. There are currently 2x 30 tonne silos on the station, which Harry and Alys purchased locally second hand, to store the lupins. Because they are only 400 km from the wheatbelt, they purchase a road train of lupins once a year. They also have a hammer mill to crack the lupins open before filling the feeders, but they are happy that they have been able to upgrade to a roller mill as part of this project because the hammer mill is small and creates a lot of dust that blocks up the feeder slots.

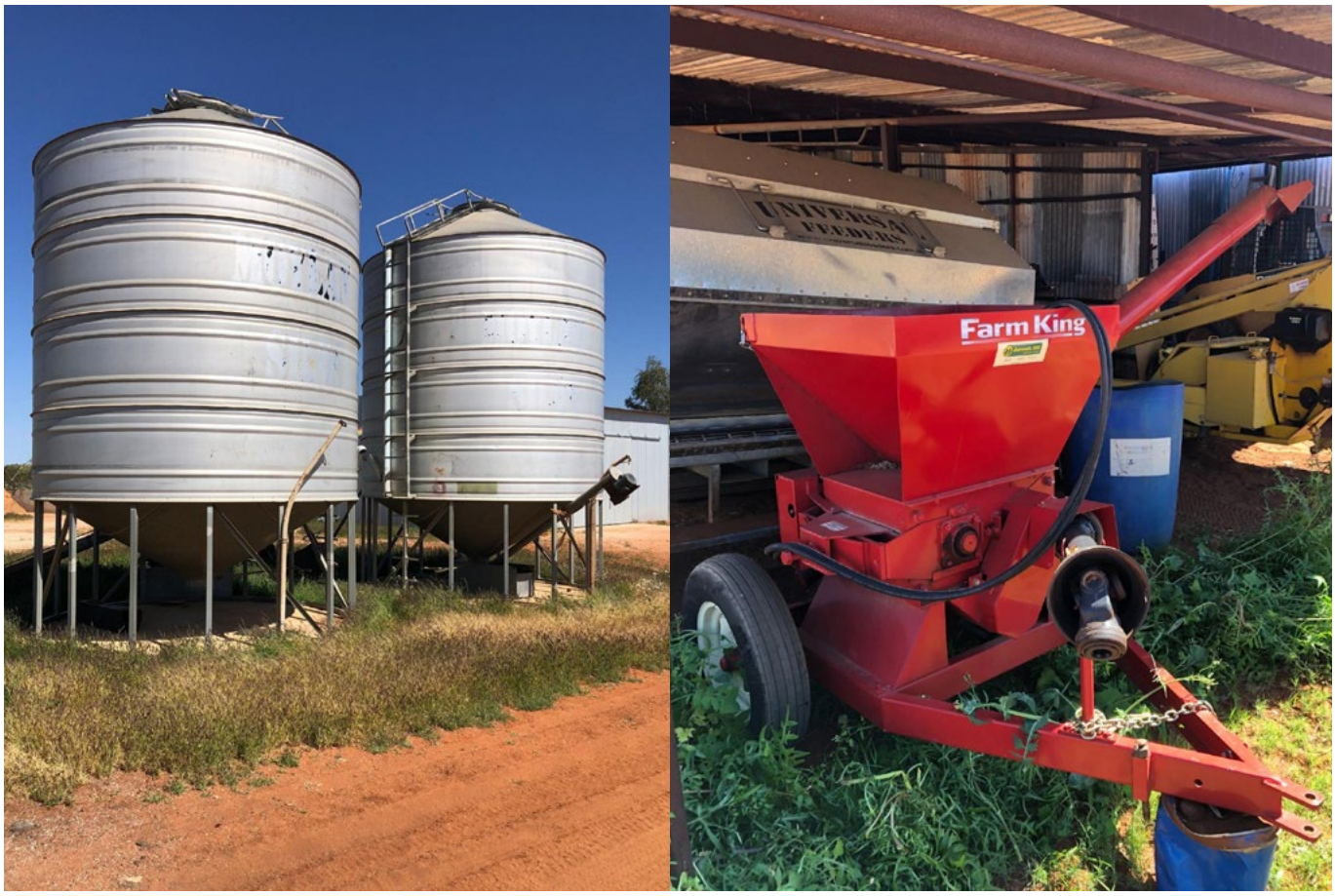


Image 5 and 6 Two 30 tonne silos (left) hold lupins sourced from the wheatbelt, which are then cracked with a roller mill (right) before loading into the lick feeders

Image 7 The lupin milling and loading process occurs in one production line, from silo (right), to roller mill (center) and finally directly into the mobile feeder (left), which is then carted out to the demonstration paddock

Loading the lick feeders is done in one assembly line: from the silo to the mill to the feeder, the process runs at a speed of approximately 6 tonne per hour. The lupins need to be cracked so they can be digested, then loaded into 1 of 12, 3000 L lick feeders, each of which holds approximately 2.4 tonnes of lupins, and finally towed out to the paddock to replace an empty one. Grain is never carted directly out to load feeders out in the paddock. With 2–3 feeders going out at a time (calculated at 1 feeder per 50–60 cattle), Harry says the process can be slow and needs to be done every 10 days or so.

Harry and Alys avoid creating another job by moving the feeders once a week when they are already out checking their windmills. They move the feeders by about 400 m each time, slowly shifting the centre of grazing until they reach a new water point. Harry says, ‘As we get closer to another water, providing the cattle know it’s there, they’ll sort of all move to the next one and then we turn the water off behind them.’ This process will ultimately shift the cattle around the paddock over the course of 6–12 months. The cattle are attracted to the moving feeder, but to gather those out in the thick scrub, Harry uses a clever trick: a wind

Image 8 Cattle access a lick feeder filled with rolled lupins in the new demonstration paddock

chime hanging off the back. Just like children flocking to an ice cream truck, the cattle hear the bell when the feeder is on the move or blowing in the wind and seek it out.

To measure whether 'rangelands self-herding' does indeed increase the weight gain of the cattle, Harry and Alys' SRRP project included the purchase of a walk-over weigher. They are still waiting for the company to set up the weigher and are in the process of organising an internet connection, which will instantly transmit information on individual weights via RFID ear tags. They hope that soon the information will help provide accurate data on weight gain and help them refine their calculations on the amount of lupins required per head. The weigher requires all four feet to be on the scale, so they will set it up at the exit point of the trap yard at whichever water point is in use, which all cattle will pass through to drink.

Harry notes that the main challenge of 'rangelands self-herding' is training naive cattle to eat lupins. He says 'it was hit or miss' for the first four years of using lick feeders, though 'they weren't trying too hard' to get the cattle interested, but a poor season solved the issue and their cattle have been interested in the lupins since. He also says that he keeps an eye on making sure that supplemental feeding stays economically viable.

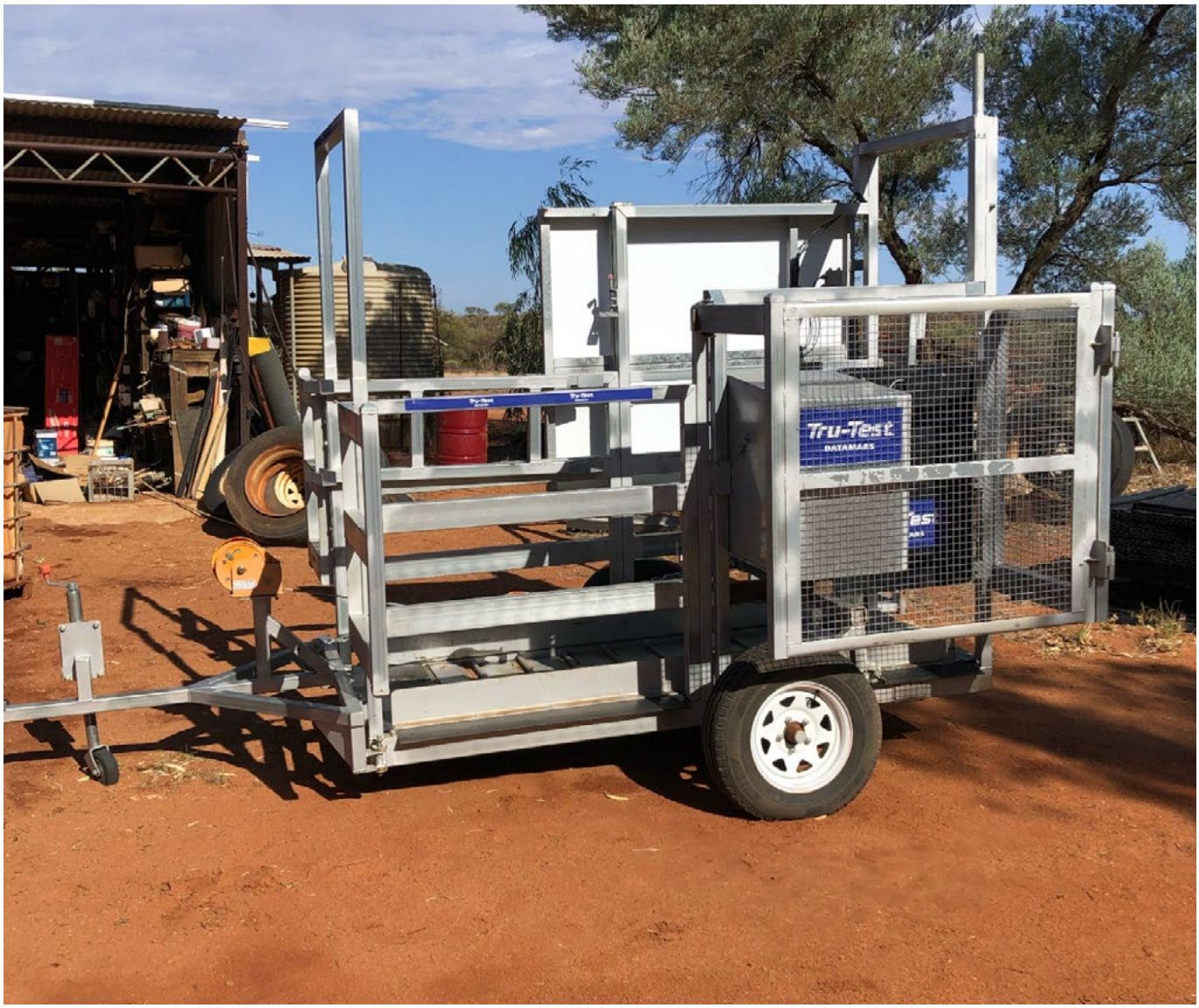


Image 9 Ponding banks built in the demonstration paddock on Carey Downs

Earthworks on scalded flood plains

Harry and Alys have initiated earthworks on three rehabilitation sites on Carey Downs, 2 of which are located inside the new demonstration paddock. They chose the areas specifically because they were dried water courses that were scalded with gullies running through them, which 'would have been some of the better areas on the place but have turned into some of the poorest'.

They came up with strategies to address the scalded flood plains on the three sites according to the ESRM plan they developed in consultation with Richard Marver. Harry says they ended up half-following the ESRM plan and half-following their own ideas when it came to actually implementing the earthworks. A combination of different strategies were used at each site, including building ponding banks and grade banks, flattening of gullies and reseeding. The earthworks were implemented over a 50 ha area, but Harry and Alys expect they should affect a much larger area:

> 'I really do hope that the earthworks are going to improve a large amount of area because we've done most of our work at the top of the landscape. And really hoping that's going to have a huge effect downstream.'

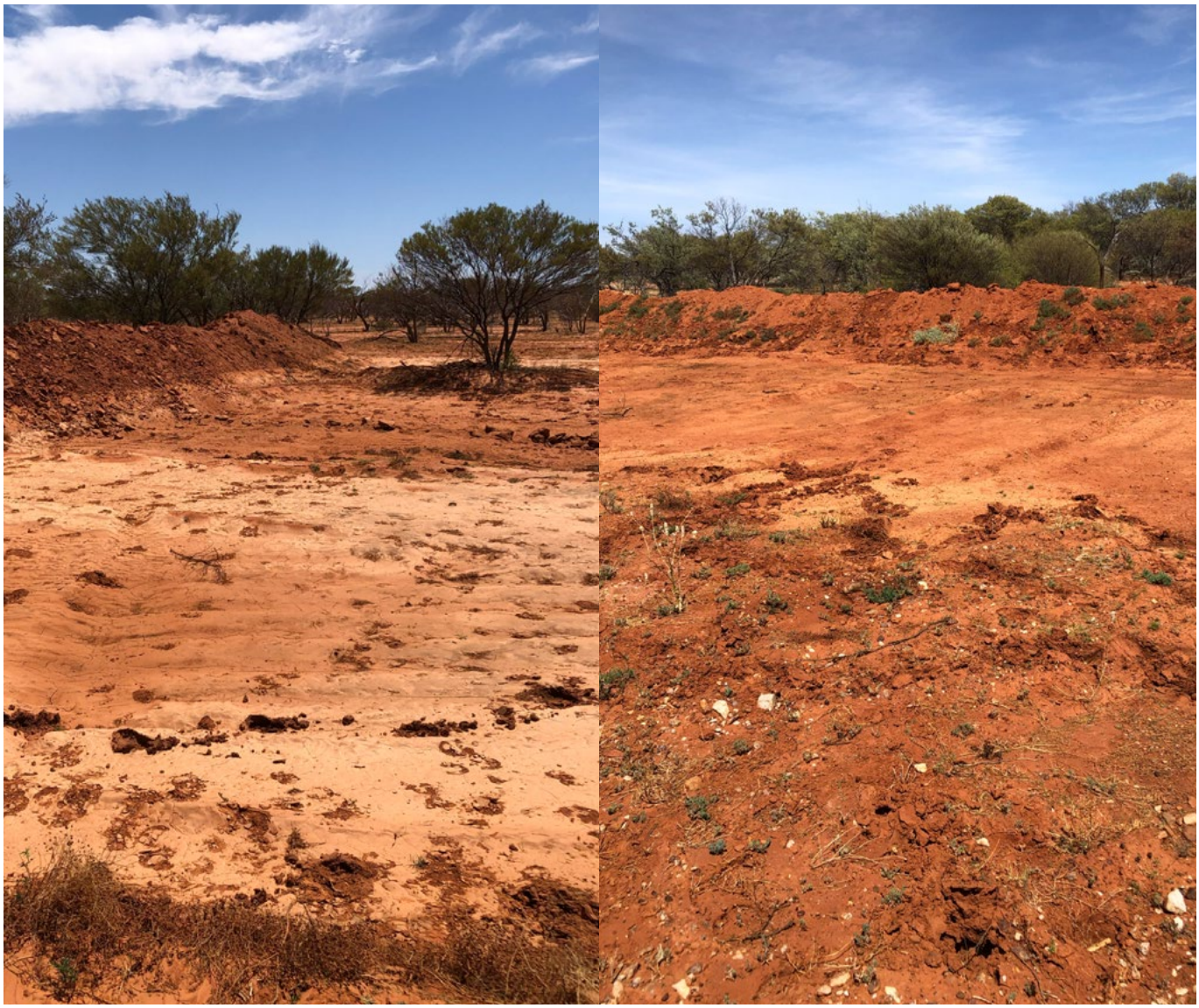


Image 10 and 11 Ponding banks built in the demonstration paddock on Carey Downs

Harry has found that reseeding with perennials is too expensive, so he's been reseeding with annuals so that after rainfall, native perennials will establish in the furrows after the annuals die off. He doesn't have any particular species in mind, but hopes that nature will take care of this. Harry is also using 'rangelands self-herding' to keep the cattle away from the earthworks temporarily to allow the area to settle and for rainfall to help the seedbank to germinate, though he notes that isn't so easy if it rains too much because water in the ponds will attract the cattle. Success, Harry says, would be to see 'anything' growing on these scalded areas.

Notably, there haven't been many bumps in the road when it came to implementing the earthworks. Harry attributes this to the fact that he had been thinking about the earthworks for a very long time and has been implementing small earthworks projects since they purchased the property.

Initial insights

Monitoring landscape recovery

Harry and Alys have already begun monitoring the progress of their 'rangelands self-herding' demonstration site. They have set up and taken baseline measurements on two rangeland condition monitoring (RCM) sites, where they record plant counts and take photos to monitor visual signs of vegetation growth over the long term. WA DPIRD has also established three 50 m monitoring transects with plant counts and photo points every 5 m, with baseline data collection already completed. The goal is to collect data at each of the sites once a year to monitor progress in vegetation recovery in response to 'rangelands self-herding' management.

Refining the 'rangelands self-herding' approach

Harry and Alys are still working on setting up the walk-over weigher to collect data on cattle weight gain, but they are feeling hopeful given their previous experience using the practice. In the meantime, having the paddock set up and starting to use the new roller mill has made the process much easier, allowing them to start implementing their grazing practice in a new area and reducing their time spent on cracking lupins and sorting out clogged feeders. They have also found a lot of utility in implementing 'rangelands self-herding' in the new paddock, especially when it comes to keeping the cattle away from the project's earthworks.

Once data from the walk-over weigher starts rolling in, Harry and Alys will begin formulating a more concrete grazing plan. Ideally, Harry says the goal would be to run as many cattle as the water could handle, which is approximately 150 head, over 6–8 months and then destock for 6 to 12 months. They will also be able to use the data to adjust the amount of feed they provide in the lick feeders to be more economical.

Effectiveness of earthworks

The earthworks on the property were completed in mid-2023, and Harry and Alys have seen water ponding in the earthworks sites after some larger rainfall events, indicating that the earthworks are helping to retain water in the landscape. They are still waiting for vegetation to establish, which hasn't been as 'startling' as Harry would have liked, but he realises 'it's just going to take time'. The first winter after the earthworks were completed was 'a disaster due to low rainfall', but they have since had a strong season with good winter rainfall this past year. They are making sure to monitor the progress of the vegetation recruitment using photo points along the ponding banks.

Valuable engagement with other pastoralists in the project

Harry and Alys have found a lot of value in networking with the other pastoralists involved in the SRRP. They've enjoyed visiting other pastoralists' projects and 'just having a sticky beak at what other people are doing' to give them ideas and motivation to complete their projects. In particular, Harry really appreciates the conversation between participants and the opportunity to learn from one another.

> "Nothing beats just going and talking to fellow pastoralists and having a look."
>
> **Harry McKeough**

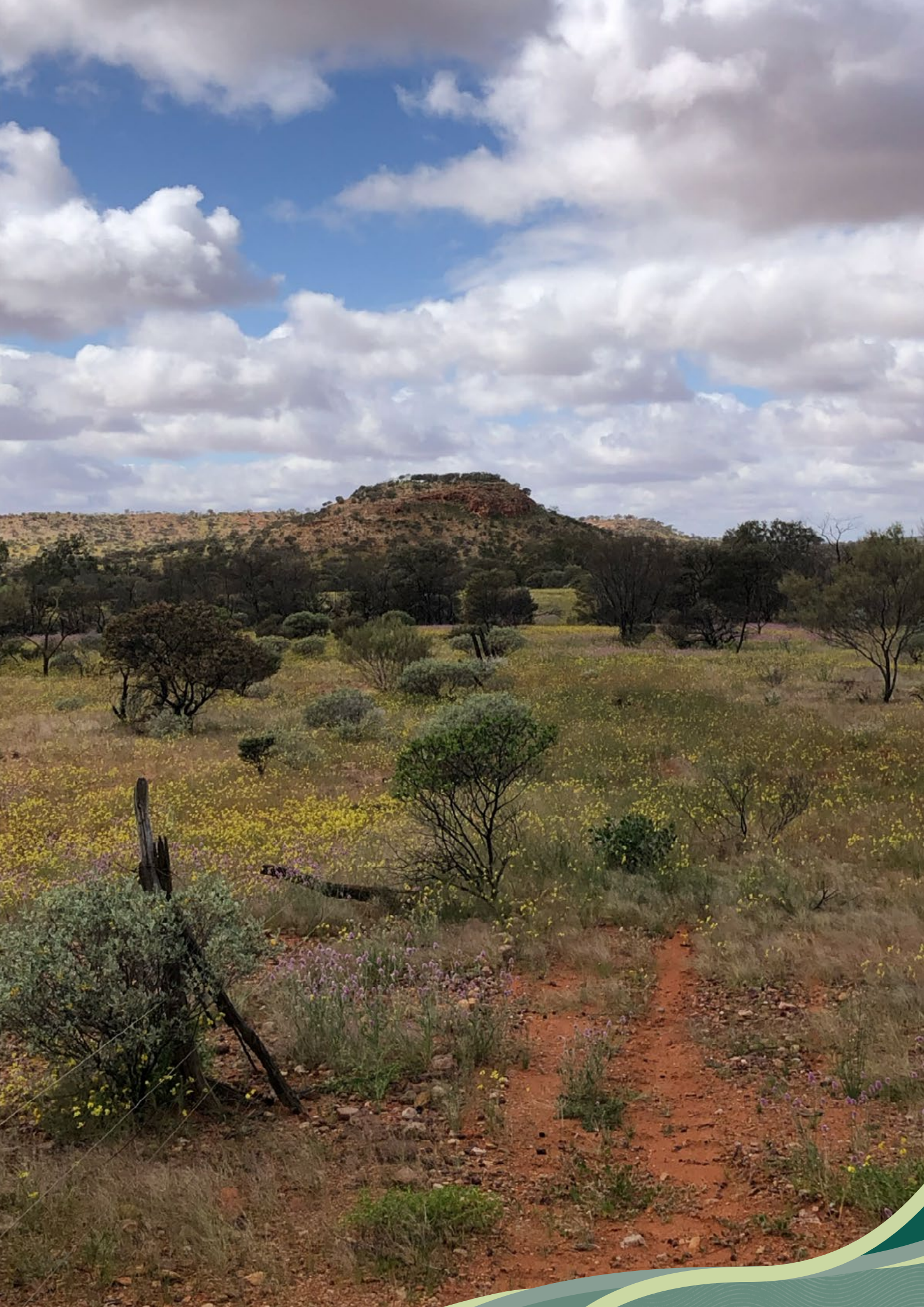
Next steps

Harry and Alys are looking forward to collecting data on ‘rangelands self-herding’ within the paddock and want to find a couple more silos second-hand, which would provide the storage capacity to enable them to purchase lupins around harvesting time every year, rather than when the silos they have are empty at any random point during the year.

They also have plans to continue implementing earthworks in the demonstration paddock as budget and time allow because the fencing helps to manage the grazing around the earthworks sites. Harry notes that earthworks aren’t always the most economically viable option, however, and that he is interested in exploring options for ‘getting cattle to do the job’ of soil disturbance.

Harry and Alys both envisage a future of the station where there is 100% groundcover and ‘all the water that falls on Carey Downs stays on Carey Downs’. Harry realises that he is ‘probably not going to see the return on investment in my lifetime’, but that he has the opportunity to ‘certainly stop things from getting worse’.

Image 12 Paddock in bloom at Carey Downs



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