The Green Challenger

Official Newsletter of the Willunga Hillsface Landcare Group

Willunga Hillsface Landcare Group

Working towards a healthy, vibrant and sustainable Willunga Basin

Autumn 2016

Deep water: a new technology probes Sydney's groundwater for the first time

Groundwater: an essential resource that provides drinking water to billions of people around the world. Here in Australia – water is a particularly precious resource that we need to manage carefully.

Mining and other sub-surface engineering projects have the potential to impact groundwater. In the Sydney Basin region, underground coal mines operate near surface water reservoirs that are important for Sydney's water supply. In other regions, coal seam gas extraction is being managed to minimise risk to adjacent aquifers.

Some mines also operate deep below wetlands and sensitive ecosystems. In other areas, copper, gold and coal mines are going deeper underground, and we have limited knowledge of how they will interact with groundwater.

It is essential that we improve our knowledge of how ground water connects with surface water and aquifers, which is precisely what we're doing at the Connected Waters Initiative Research Centre (CWI) at UNSW.

Laser sniffer

The best tracer of groundwater is the water itself. In our recent study, we measured the different isotopes within water found in the rock. This can tell us about surface water-groundwater interactions in the past, and provides an essential baseline for any future changes.

To gather the samples, we had to drill 300 metres through layers of sandstone, siltstone and claystone to extract a core. This core then had to be carefully packed and sealed to preserve the moisture held in the rock.

Back in the laboratory, we carefully prepared bags with moist rock samples and dry air. We then used a specialised laser technology, called Off-Axis Integrated Cavity Output Spectroscopy (OA-ICOS) to "sniff" the air in the bag to determine its composition. It uses a system of mirrors to measure the amount of laser energy absorbed by water molecules of different mass, and can pick out different water isotopes.

We used this new technology to measure for the first time the water in rock pores of the strata in the Sydney Basin. We compared its isotope composition to known natural tracer composition in rainfall, surface water and other known water sources.

This allowed us to work out where the water came from. We also identified four distinctive layers of rock, or hydro-geological zones, which control groundwater movement in the Sydney Basin.

Before we conducted our research, we simply didn't know much about the deep groundwater system in Sydney Basin. With our new record, this means that if some future mining project impacts the groundwater, we can now use these pore water isotope records as a novel baseline to help determine the extent of the impact.

Deep water

Water moves very slowly underground at our site, and has taken a long time to reach a depth of 300 metres. The source of the groundwater is rain, either directly entering the ground from rain events, or indirectly through water leaking from rivers, lakes and swamps.

We found the isotopic composition of the deep water was similar to that of modern rainfall, which means the groundwater system in the Sydney Basin has been replenished under similar conditions to today for thousands of years. This provides us with baseline conditions for water in the Sydney Basin.

Without the new water tracing technology, it would not have been possible to identify the hydrogeological zones and assess their characteristics.

This new technology also has the advantage that hundreds of rock samples from a single core can be analysed quickly and cheaply, as an alternative to installing many boreholes at different depths. The new approach can also be used for sites where the groundwater is very deep or held tightly in the pores of the rock.

It can also be used where the movement of the ground can damage water monitoring bores. This technology can help trace where surface water flows underground,

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YACCA... Youth And Community in Conservation Action

2016 has started off as a busy year for YACCA. The original group is going strong with a range of projects and activities to keep us busy. Plus we have started a Tuesday group due to the huge number of kids interested in joining YACCA. Our Tuesday group now has 13 members with two of our original members coming in to help lead the group. There are still some positions available so if there are still any young people out there wanting to join, do not hesitate to contact the Willunga Environment Centre.

YACCA started the year with a survey at the Aldinga Reef with Reefwatch. Those who came along were treated to a plethora of shells, vegetation, crustaceans and fish. YACCA has also been kindly invited to two trapping nights at Tatachilla Lutheran College. Here our members assisted in catching two female and two male potoroos for the Conservation Ecology Centre in Cape Otway, Victoria. Hopefully these little guys will be helping out the breeding program they have in Victoria. YACCA is very much looking forward to hearing the pitter-patter of baby potoroos when we go and visit the Centre in October.

YACCA also helped in collecting data on the population numbers of the Mountain Galaxias fish in the Wirra Creek. The species is quite rare and by YACCA setting up the fyke nets and some of our lucky members helping take them in, we are helping in the continual monitoring of the species. This year we caught 40 fish, a significant increase from this time last year. Clearing of invasive species such as the desert ash and olive trees, by Trees For Life and the Onkaparinga Council, have assisted in the increase of the species. YACCA is excited to continue working on the Willunga Wirra with Trees for Life and further helping the species there.

I have also started working with Landcare SA as their newly appointed Young Landcare Ambassador. Currently there are talks of having YACCA groups all over South Australia so that young people all over the state can participate in environmental activities. This is a project that is being looked into by Landcare SA. Landcare is also further hoping to promote youth in the environmental sector through a program called *Intrepid Landcare*, a group currently running in NSW for young people in their twenties and thirties who are looking to volunteer in environmental works.

It's exciting to see so much youth environmental work at the moment!

SASKIA GERHARDY

Editorial

Looking back to our AGM last year, the group was pleased to welcome Shirley Worsfold as a new member of the committee.

The meeting was not very well attended, but the speaker was entertaining so we had a good evening.

The plight of our honey bees continues to cause concern. I only heard part of a story on the radio recently where they were resorting to hand pollination because of the lack of bees! The following snippet was at the end of an article about bee numbers and I felt it was worth repeating.

"Is it worth trying to put a price on the natural world, when things like water and food are priceless?' Yes, says Paul Sutton, Professor of Environmental Science at University of South Australia - 'without knowing the value of the environment, we might not value it at all."

BRIAN

Deep water

Continued from Page 1

and where the connection exists between the surface water and groundwater which support creeks and wetland ecosystems.

Our research provides a method for measuring a baseline against which we can assess any future impacts on groundwater from mining operations, groundwater abstraction or climate change. The technique can be used anywhere in the world to provide similar data.

Given the immense importance of groundwater both locally and regionally, it is important that more research is undertaken in order to provide better understanding of this precious resource.

http://theconversation.com/deep-water-a-new-technology-probes-sydneys-groundwater-for-the-first-time-47697?utm_medium=email&utm_campaign=Latest+from+The+Conversation+for+October+5+2015+-+3542&utm_content=Latest+from+The+Conversation+for+October+5+2015+-+3542+CID_996f6fcbb19dbcc930ab3b7dac73bcc0&utm_source=campaign_monitor&utm_term=Deep%20water%20a%20new%20technology%20probes%20Sydneys%20groundwater%20for%20the%20first%20time

Korean calicivirus to be introduced to control Australian feral rabbits

A Korean strain of calicivirus will soon be released to further curb feral rabbit populations that have developed a resistance to myxomatosis and other biological controls.

The new virus, known as RHDV1 KV, is awaiting final approvals but is likely to be rolled out nationally within a year. Dr Elmsworth said the virus worked differently to myxomatosis…

A call has gone out for landholders who have rabbits, and think that the virus might be good for them, to put an expression of interest in.

Full article available at:

http://www.abc.net.au/news/2016-04-12/korean-rabbit-virus-to-be-introduced/7320846

Regreen the Range Report

Works are about to begin on the next phase of the continued erosion control works on the creek systems which flow off the hillsface and into the Aldinga Washpool. The erosion control works undertaken last year have proved to be very effective in trapping sediment flowing from the hillsface thereby keeping the sediment on the properties from where it was eroded and reducing the amount deposited into the Washpool.

The grade control structures constructed this season are on the neighbouring property from where the structures were made last season, resulting in a major proportion of the creeks which flow into the Washpool having sediment controlling devices restricting the amount of sediment flowing to the Washpool. Over time the sediment deposited upstream from the grade control structures will allow for the revegetation of the creek beds and banks which in turn will further reduce the speed of the water and trap even more sediment. Ultimately these creek systems should stabilise allowing a return to natural processes of erosion and soil building.

The Landcare group is also preparing for another year of undertaking its revegetation program to further expand the Regreen The Range project. Three major properties will be revegetated this season with two properties near McLaren Flat and one property between Willunga and Sellicks Hill. The revegetation program has become more challenging over the past few years with very unpredictable rainfall patterns and the window to undertake revegetation getting smaller and smaller. The revegetation program has needed to begin much earlier in the season recently compared to previous years and the amount of losses encountered due to water stress has been much higher due to the lack of rainfall events over Spring and Summer (wonder if something is changing?).

The Landcare Group is becoming involved with the McLaren Vale Biodiversity Group to increase the biodiversity in vineyards around the district.

This involves engaging with the McLaren Vale sustainable Winegrowers, the AMLR NRM Board, local community groups and interested members of the public to undertake woody weed removal, namely feral Olive, Blackberry, Dog Rose, feral Almond and Prunus species, and replace these pests with indigenous species to attract beneficial species into the vineyards. This will assist the landholders to increase their biodiversity scores, thereby promoting the industry as a clean and green industry and making their produce more attractive to consumers.

Wayne Lawrence

Having only just read about this Biodiversity Group I had a look at their facebook page and found the following: Biodiversity McLaren Vale - Tree Planting first Sunday of every month at 8am until 10am to prepare sites for tree planting and planting native local species. Please text Geoff Hayter for more information on the next working bee/workshop planned for the 1st of May – 0401990592. It would be great to see you there!

This year…

World Environment Day is celebrated every year on 5th June to raise global awareness to take positive environmental action to protect nature and the planet Earth. It is run by the United Nations Environment Programme.

As part of our World Environment Day 2016 activities, Landcare Australia will be running a fundraising and environmental awareness initiative, where we ask every individual, business, government agency, politician and media outlet we engage with across the nation "What positive #Action4theLand will you take?"

SA bushfires: Farmers fight to save topsoil

By Kerry Staight, Landline

A huge expanse of normally productive farming land in South Australia's mid north now looks more like a desert after a bushfire tore through 85,000 hectares last November, killing two people.

"We're looking at 55,000 hectares at least of bare land which is something we haven't seen for a long time," Mary-Anne Young from Primary Industries and Regions SA (PIRSA), said. "In a drought there may be a paddock here and a paddock there, but in this situation all of the land has been exposed and it's all drifting."

Pinery farmer Andrew Barr lost his house in the blaze, which destroyed 91 homes. He said watching his topsoil blow away was almost as devastating, after spending more than a decade nurturing the land. "Most of us pride ourselves on having no erosion anymore with the conservation farming systems that we run and we haven't seen our soils for probably ten years," he said. "This year we've got far too good a look at them."

…the soil loss that has followed the fire not only threatens the foundation of farmers livelihoods, it is also taking an emotional toll.

"As soon as the wind comes up the dust comes up and it wears you down," farmer Mark Branson, who lost 1,600 sheep in the fire, said. "When the winds are up they're just blowing dust all day long."

Farmers try to prevent soil erosion

To try and secure his land Mark Branson is bringing heavier lumps of soil to the surface by ploughing his property. It goes against the grain for the fifth generation grower who has not tilled his farm prior to seeding for 15 years, but it is something many are resorting to in an effort to reduce the soil erosion.

Among them is highly regarded Suffolk sheep breeder Brian Fischer, who lost his entire ewe stud in the blaze. He has come up with a very striking square cultivation pattern on his property at Wasleys.

"Whichever way the wind blows it can't get a start 'cause it's always at an angle to the furrows," Mr. Fischer said. "My father did it back in the 1940s with a team of horses and a cultivator so I can't take much credit for the idea. "I just implemented it and it worked a treat. It stopped it completely."

Farmers are trialling other methods to hold lighter soils together including spreading clay and piggery litter and sowing cover crops. Mr. Barr has put in temporary wheat and barley crops on his sandy country. He is not sure whether they will last long enough to do the job, with more rain needed, but he said the small plants were a welcome sight. "Green is just a breath of fresh air to us," he said. "We haven't seen much of this for the last three months."

Opportunity to redesign properties after fire

The top soil may have taken a hammering, but Ms. Young said what's underneath should have escaped relatively unscathed because of the speed of the bushfire. "It probably didn't hang around and start burning things underneath the soil," she said. "We think that probably the organic matter levels are still fairly intact."

Mr. Barr said they were also trying to turn the empty landscape into an opportunity and redesign their properties so they work better with modern practices and machinery. "We decided that we would take the opportunity to consider the farm a blank slate. We didn't want to just rebuild how it was, because if you're looking for a positive to come out of this then you need to think what this farm should look like in ten or twenty years time."

This story edited: full story at: http://www.abc.net.au/news/2016-03-05/sa-farmers-fight-to-save-soil-after-devastating-bushfires/7221906

Fencing day

Farmers and volunteers in the Pinery bushfire zone are taking up fencing training. BlaizeAid …and Waratah recently held a fire fencing day at the Hamley Bridge Golf Club.

Attendees included volunteers, local farmers and fencing contractors who will work together to replace hundreds of kilometres of fencing lost in the fire.

To date a total of 196 volunteers have cleared more than 250km of fencing and have so far re-installed 90km. *Fantastic effort!*

The above edited from smartfarmer volume 12, April 2016

New app for growers

Dr. Gordon Rogers, Applied Horticultural Research

The new Applied Horticultural Research app, ***Veg Pest ID***, can be used to identify pests and diseases on Australian vegetable crops such as:

- Baby leaf crops (e.g. Spinach. Lettuce, Rocket, Mizuna)
- Brassicas
- Carrots, Celery, Parsley
- Sweet corn
- Sweet Potato

To download the app, simply search ***Veg Pest ID*** online in the Apple Store for iPhone and iPad, or in the Play Store for Android phones and tablets. Once installed the device does not need to be connected to the internet.

Development of the app was funded by Horticulture Innovation Australia Limited using the vegetable levy funds from the Australian Government.

Interesting walk

Free Educational Farm Walk at Aldinga with Andy Cole, Land Management Advisor on Sat 28 May 9.30 am.

http://www.horsesa.asn.au/events/event/

Farming in 2050: storing carbon could help meet Australia's climate goals

Australia's agricultural lands help to feed about 60 million people worldwide, and also support tens of thousands of farmers as well as rural communities and industries.

A growing global population with a growing appetite is placing increasing demands on our agricultural land. At the same time, the climate is warming and in many places getting drier too.

Agriculture, and particularly livestock, is currently a major contributor to greenhouse gas emissions. New markets and incentives could make storing carbon or producing energy from land more profitable than farming, and turn our agricultural land into a carbon sink.

How might these competing forces play out in changing Australian land use? Our research, published in Global Environmental Change, assesses a range of potential pathways for Australia's agricultural land as part of CSIRO's National Outlook.

Changing landscapes

The only constant in landscapes is change. Ecosystems are always changing in response to natural drivers such as fire and flood…

Indigenous Australians manipulated the Australian landscape and climate through burning for millennia, sustaining a population of around 750,000 and underpinning a culture.

European colonisation brought a different and more pervasive change, clearing land, building cities, damming rivers and establishing an increasingly mechanised and industrialised agriculture…

In South Australia, researchers in the early 1960s raised the alarm that the feverish post-war period of soldier resettlement, land clearance and agricultural development threatened entire native plant and animal communities with extinction. The government's response over the following 30 years was to expand greatly the conservation reserve network and eventually prohibit land clearing…

In many places the focus on agricultural productivity has come at the expense of ecosystems. Biodiversity, soil and water are all on downward trends.

Is the balance right? Opinion varies. Many would say no, and consider the status quo to be stacked strongly against the environment. Others see agriculture as entering a boom time, driven by growing population and rising food prices. Substantial interest from overseas investors in Australian agricultural land reflects this opportunity.

…Lessons hard-learned by South Australia seem to have been forgotten. Rates of land clearance in Queensland are rising again since 2010 after a long-term trend of decline…

Worldwide, Australia is not alone — many international examples also exist of recent, massive, rapid and accelerating changes in how land is used.

Australia has historically taken a hands-off approach to managing land use change, instead focusing on increasing the productivity and competitiveness of agriculture. Apart from a handful of planning and environmental regulations, the use of land has been subject to minimal governance or strategic direction.

Where to from here?

What is it that Australians really want from our land? We know what we don't want: wall-to-wall crops, pasture, buildings, gas wells, mines, wind farms or trees.

We can expect healthy debate around the margins, but, in general, diversity, productivity and sustainability seem to be widely valued. Most of us want to leave the place in decent condition for future generations…

Once we know what we want, we can work out how to get there.

That's where science can help. We now have the ability to project changes in land use in response to policy and global change, and the environmental and economic consequences.

CSIRO's recent National Outlook mapped Australia's potential future pathways. A companion paper in *Nature* found that it is possible to achieve strong economic growth and reduce environmental pressure, if we put the right policies in place now. It provides a glimpse of how our rural lands might respond to coalescing future change pressures.

Farming carbon

In our modelling, carbon sequestration in the land sector plays a key role of Australia's future. Land systems can help with the heavy lifting required to hold global warming to 2°C as recently agreed in Paris. There are several factors that could drive this change, including climate, carbon pricing, global food demand and energy prices.

We modelled the economic potential for land use change and its impacts in over 600 scenarios, combining a suite of global outlooks and national policy options.

A carbon price, which enables landholders to make money from storing carbon in trees and soils (often much more money than from farming), may increase pressure to shift farmland to restored forests.

Who knows? A pay rise while watching trees grow could be an attractive proposition for our ageing farmers. Complementary biodiversity payments could also help arrest declines in wildlife and help it adapt to climate change.

If we redouble our focus on productivity, by 2050 agriculture will produce more than today, even as farmland contracts. The least productive areas are less able to

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There's a way to save our future: It's under your feet

Transitioning to organic regenerative agriculture practices 'offers the best, and perhaps our only, hope for averting a global warming disaster'. Deirdre Fulton from Common Dreams reports.

A critical tool in the fight against global warming is right below our feet. So where is this "shovel-ready solution" amid all the talk of climate fixes in the wake of the COP21 summit in Paris?

An Associated Press article published recently, for example, professes to outline 'methods to achieve negative emissions', wherein humans remove more greenhouse gases from the atmosphere than they put in it. The AP quotes scientists who say 'it's clear' that the goals laid out in Paris '...cannot be reached without negative emissions in the future, because the atmosphere is filling up with greenhouse gases so fast that it may already be too late to keep the temperature rise below 1.5°C.'

Among the solutions mentioned in the piece are: '...fertilizing the oceans with iron to make them absorb more carbon, ...planting more forests and carbon capture technologies.'

There was no mention of agro-ecology, or regenerative agriculture — practices that work with nature, avoiding the damaging impacts of industrial agriculture, such as no-till farming, composting, planned grazing and cover crops.

As Diana Donlon, food and climate director at the Centre for Food Safety, said in December last year to mark World Soil Day: "Through regenerative farming practices, we have the ability to pull carbon out of the atmosphere, where it is wreaking havoc, and store it in the soil, where it is greatly lacking and where it has multiple benefits for food, water and climate security."

For Katherine Paul, associate director of the Organic Consumers' Association, omitting these practices from mainstream reporting, and not including them in the conversation about climate change, is a missed opportunity. As Ms Paul told Common Dreams: "No talk of global warming solutions is complete without addressing agriculture—both its contribution to global warming and its potential for solving the crisis."

She noted that the world's soils have lost 50 to 70 per cent of their carbon stocks and fertility — a crisis largely attributed to modern chemical-intensive, factory-farm, GMO-based industrial agriculture. She cited a recent report from GRAIN, which shows that when deforestation, transportation, synthetic fertilizer production, and wetlands destruction are factored in, Big Ag contributes more than 50 per cent of total greenhouse gas emissions.

"We must restore the soil's potential to store carbon," Paul declared. "We must also, in addition to reducing emissions, draw down billions of tons of CO_2 already in the atmosphere."

She continued: "Fortunately, we have the tools to do this. Organic regenerative agriculture and land use is the other half of the climate solution."

Though some have said the COP21 talks were "a disaster for agro-ecology", Paul points to the French 4 per 1000 Initiative, through which governments can now incorporate carbon sequestration through organic agriculture into their climate plans.

Paul urged the U.S. to follow France's lead: "Instead of subsidizing a food and farming system that contributes to global warming while degenerating soils and local economies, we should start rewarding farmers and ranchers for restoring the soil's organic matter and drawing down carbon."

Yet a recent study looking at research-dollar allocation within the U.S. Department of Agriculture revealed a dearth of funding for agro-ecological research and "...an urgent need for additional public funding for systems-based agro-ecology and sustainable agriculture research."

Indeed, the future of the planet depends on it, said Paul: "Transitioning from industrial ag, a huge contributor to global warming, to organic regenerative offers the best, and perhaps our only, hope for averting a global warming disaster."

This story was originally published in Common Dreams on 24/12/2015 under the title 'There's A Way to Save Our Future. So Why Aren't More People Talking About It?' and has been republished under a Creative Commons licence. You can follow Deirdre Fulton on Twitter @deirdrefulton.

Farming in 2050

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compete with reforestation and other new land uses, leaving the most efficient agricultural land in production…

Australians care about their land and are more aware than ever about what is happening to it. While we can have some control over the future of our land, and we do exercise this control in certain circumstances (such as urban planning), our long-term approach to rural land has been to let environmental and economic forces play out and let the invisible hand of economics determine what will be.

Given the pace at which change can happen, a smarter approach will be to start the conversation, work out what it is we want from our land, and put the policies and institutions in place to get us there.

https://theconversation.com/farming-in-2050-storing-carbon-could-help-meet-australias-climate-goals-54899?utm_medium=email&utm_campaign=Latest%20from%20The%20Conversation%20for%20March%2030%202016%20-%204577&utm_content=Latest%20from%20The%20Conversation%20for%20March%2030%202016%20-%204577+CID_e62f94a9b435c7e1d973e77e41f1e938&utm_source=campaign_monitor&utm_term=Farming%20in%202050%20storing%20carbon%20could%20help%20meet%20Australias%20climate%20goals

Carbon Engineering unveils groundbreaking carbon capture project in Squamish, B.C.

The mountain air in Squamish, B.C., could soon be even fresher with the launch of a groundbreaking carbon capture operation.

The pilot project will suck carbon dioxide from the atmosphere, not from an industrial plant like other such operations, with the goal of turning the gas into fuel.

Built and operated by Calgary-based Carbon Engineering, the $9-million plant will capture about one tonne of CO_2 per day, which is the equivalent of taking about 100 cars off the road annually.

Founded by Harvard climate scientist David Keith and backed by big-name investors including Bill Gates, Carbon Engineering has spent several years turning academic research into technology that could be commercialized.

Potential for larger impact

The operation has been capturing CO_2 since May, but its primary purpose is to prove that the technology can work on a much larger scale, taking in up to one-million tonnes per day.

"It's still a pilot-scale plant," explained Adrian Corless, Carbon Engineering's CEO. "But it's very important, because it's the first time that anyone's demonstrated a technology that captures CO_2 that has the potential to be scaled up to be large enough to be relevant from an environmental or climate point of view."

The plant works by moving large volumes of air through a piece of equipment where CO_2 is absorbed by a liquid solution, and then transformed into pellets of calcium carbonate. The pellets are then heated to 800 or 900 degrees Celsius and break down, releasing pure carbon.

"There's no real magic to it," Corless said. "The pieces of equipment already exist today in very large scale. And we've really adapted them from other industries."

It may not be magic, but it is innovative — Carbon Engineering is a world leader in direct-air carbon capture, Corless said.

Soon the company will take the technology even farther, building another system that will turn the captured carbon into useable transportation fuel by adding hydrogen from renewable sources, such as solar, wind or hydro.

"It's not something that we were the first to think about it," Corless said. "I think we're just the first to be in position with that key piece of technology — which is the scalable source of atmospheric CO_2 — that allows you to think about making a larger scale fuel synthesis plant."

Turning CO_2 into fuel

Once that plant is running in 2016 or 2017, it will produce 200 to 400 litres of gasoline or diesel per day, and there are already groups interested in buying the product, Corless said.

Eventually, the fuel could be used for ships or planes.

"The nice thing about the technology is that there are no real limitations for it to ultimately, in theory, displace all of the existing fossil-based transportation fuels," Corless said.

Built on the site of a former Nexen chemical facility in Squamish, Carbon Engineering's pilot plant is bringing new technology to an area undergoing long-term development.

The pilot plant could be game changing in terms of reducing the global carbon footprint and it could make the mountain town a hub for green technology in the process, said Mayor Patricia Heintzman.

"When you start to bring in people who are problem solvers and entrepreneurs who see opportunity when it's there and aren't blind to it, that's an exciting place for a community to be. You can really grow on that," she said.

"I think it's great when smart innovators are coming into a community. That's where your future is."

http://www.cbc.ca/m/touch/business/story/1.3263855

There is a short video at the above website that explains this very well. This project backed by Bill Gates.

Gemma Karstens-Smith The Canadian Press.

More apps: Control of feral cats

Landcarers are being called on to help cease wildlife extinctions caused by feral cats.

To help track efforts, a new, easy-to-use phone app has been designed to log sightings of feral cats and work done to control them. The data feeds back to the Australian Government to help build a national picture of what is happening and what needs to be done.

To download the free app, visit www.feralcatscan.org.au.

Smart land management

For absentee landholders, managing a property remotely can be challenging and could result in weed, pest and productivity issues.

Greater Sydney Local Land Services has established a unique project to help absentee landholders with workshops and the development of a smartphone app. The LandSmart app will be available for download at the end of March 2016 from the iTunes App Store and Google Play store.

I'm assuming this app could still be useful to farmers in this state.

Willunga Hillsface Landcare Group
P.O. Box 215, WILLUNGA, S.A. 5172

Meeting dates vary, but are usually held on Mondays monthly at 5 p.m. in the Willunga Hub, cnr. St. Peters Terrace, Willunga.

All members are welcome to attend these meetings.

If you would like to receive your copy in PDF format (via email) please let me know as this saves the group postage. This is my address: 2garfy94@gmail.com.

Willunga Hillsface Landcare Group

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Our thanks to Leon Bignell, MP, local Member for Mawson for printing this newsletter.