

## Successful 2017-18 Beyond SoilCare Small Project Grants

Organisation	Project Name	Project brief
<b>Creighton's Creek Landcare Inc.</b>	Beating climate change with healthy soils and pastures	In a practical way, a number of key issues have been identified affecting the profitability and sustainability of pastures in the Creighton's Creek catchment. This project will demonstrate the alternative clover options for the district and establish a longer term evaluation of the persistence of phalaris cultivars for the district. It will also demonstrate the newest range of herbicide options for the control of undesirable grass and broadleaf weeds in pastures and the impact this has on feed quality and environmental outcomes.
<b>Euroa Arboretum</b>	Healthy hectares for small landholders	An emerging trend within the Goulburn Broken region is the purchase of small blocks of land by lifestyle farmers. In general, some small landholders come from a non-agriculture background, lack practical land care skills and have limited connection with their local community. The aim of Healthy Hectares is to engage, empower and inspire lifestyle farmers to develop well managed, diverse, productive and environmentally sustainable farms.
<b>Gecko CLaN</b>	Step2 in efficient farm water planning and management for grazing enterprises.	This project will demonstrate best practice farm water management (farm dams) that underpin grazing management enterprises. It aims to ensure farmers undertake best planning in farm dam design and construction before works are started. It also will demonstrate what improvements can be undertaken to make best efficiency of their water resources. These benefits will help them be more resilient and help their grazing enterprises cope with fluctuations in seasonal water shortage.
<b>GV Food Cooperative Inc.</b>	Get the dirt podcasts	"Get the dirt" will be a podcast series aimed at providing farmers from all types of farming enterprises with the latest insights from soil experts. The key message is "farmers are the stewards of the soil". 10 podcast interviews will be created, with each interview about 40 minutes long to allow for in-depth conversations. Soil experts from Australia and overseas will be interviewed to develop these podcasts that anyone can listen to at any time.
<b>Hughes Creek Catchment Collaborative</b>	A dungless decade	A decade ago enthusiastic Landcare groups introduced exotic dung beetles to the Goulburn Broken Catchment. This project aims to review the impact of these humble dung beetles. The introduction of dung beetles was intended to address fly numbers that cattle dung harbours as well as improving soil health by moving fresh dung from the cow pads and rapidly burying it down tunnels, releasing nutrients back into the soil aerating it and increasing water infiltration. We propose to undertake a survey of dung beetle populations with the assistance of Bert Lobert, who organized and monitored the first release. The question we would like to answer are: Have the introduced dung beetle species persisted and continued to breed and expand their territory. Which species are still present? Which species have disappeared? Are they winter active or summer active? Have farmers encouraged dung beetle activity on their farms by using beetle friendly drenches? Are there obvious holes in our dung beetle population? Would more landholders be keen on releasing dung beetles?

<b>Longwood East Landcare Group</b>	Managing our farms better in Longwood East	Longwood East Landcare group is in the foothills of the Strathbogie Ranges, and includes flat and steep country. There are a range of lifestyle farmers with some farming experience that have moved into the region. These farmers run stock or have olive or fruit trees growing on them, mostly on 50-100 Acre properties. The knowledge the landholders have on stock, pastures, crops and soils could be improved to reduce risks such as erosion and weed infestation. In addition, some landholders have issues with erosion gullies and sodden land after rain. Landholders will be encouraged to attend a series of workshop and field days to provide them with practical advice to address these issues.
<b>Riverine Plains Inc.</b>	Improving fertiliser and chemical use through local, real time weather and soil information for farmers of the Productive Plains.	Farmers frequently have to rely on information from weather stations that may not accurately reflect their farm. Riverine Plains Inc. will install two weather stations within the cropping region of the Goulburn Broken catchment to contribute to improving the quality of weather information. They will also use these weather stations as the focal point at subsequent soil pit workshops to discuss the importance of understanding weather and soil moisture data when making spray and fertiliser decisions. We have received positive feedback from farmers who are using the information from the seven weather stations installed previously to plan and record their spraying of agrochemicals through knowledge of wind speed and delta T, and more strategic application of fertilisers through understanding soil water content and the potential for nitrogen (N) movement down the profile. Weather stations are an ongoing investment into the local agricultural community; an investment which will actually increase in value with time, as more farmers become aware of the information and access it, assisting them in making informed, environmentally responsible decisions in regards to nutrient management, frost risk, heat stress and soil moisture storage. The data from all the weather stations will be publicly available at <a href="http://www.riverineplains.com.au">www.riverineplains.com.au</a>
<b>South West Goulburn Landcare</b>	Demonstrating innovative soil health methods	This project will demonstrate new, innovative and cost effective soil protection techniques. It will provide key understanding to landholders about erosion processes, the effective and non-effective approaches to erosion control in a context that considers local soil and climatic factors. A comparison of different approaches will aim to give landholders options that may suit their personal and financial circumstances. This project will establish four demonstration sites using synthetic grow bags, rock armoring and the use of organic matter to improve sodic and tunnel erosion to showcase different methods of soil protections with itemized costings and landholder considerations.
<b>Up2Us Landcare Alliance</b>	KISS the dirt	Mansfield's soils are highly erosive with dispersion and slaking occurring in many of the sub – soils throughout the region. Currently and historically land within the district has been sub-divided; bringing "tree-changers" to the region that often have some understanding of local soil chemistry and its physical responses. It is not uncommon for lifestyle properties to be sold within 5-10 years of purchase, suggesting a high turnover of people whose knowledge and experience with our slaking and dispersive soils is poor. Whilst generalist knowledge about erosion has been provided to landholders little global information has been provided in the form of action based outcomes to prevent further erosion. This project will enable us to provide on ground activities and demonstration sites for landholders to create a good understanding of activities they can carry out on their own properties.

<b>Victorian No-Till Farmers Association</b>	Regenerative agriculture – reducing costs, improving production, caring for our natural assets	This project will introduce growers to the concept of regenerative agriculture where production systems look closely to nature to improve productivity whilst looking after our natural ecosystems. A regenerative agricultural system looks to rebuild / grow soil rather than minimize losses. Growers will gain a comprehensive understanding of energy, carbon, nutrient and water cycles. This project will help fund 20 growers to attend the Vic No-Till conference in Shepparton on the 13 July 2017.
<b>Upper Goulburn Landcare Network</b>	Small landholder introductory forum	Small landholders have very limited access to land management advice. The small landholder forum presented in 2016 was well received and it is envisaged that a follow up forum through this funding will enable us to reach a wider mail out, which in conjunction with the Healthy Hectares program will provide a range of learning options for landholders.
<b>Warrenbayne / Boho Land Protection group</b>	Understanding microbial / plant symbiosis to double pasture production	<p>Problem: Understanding how to promote fertility and nurture difficult soils. The soils are largely porous granitic silty soils, characterized in places with compaction in the top-soil, allowing very little plant root development and, in dry conditions, most rainfall is lost in surface runoff. This funding will enable us to remedy these complex issues largely by maintaining and building soil fertility through negating the mobilization of salt through the subsoil, bringing about a structure of aggregation in the top 150mm to hold moisture and nutrients.</p> <p>We need to know how to manage relatively fragile soils and find ways to develop and build natural pathways to increase water holding capacity, nutrient sinks (within the soil profile) and to ultimately increase the symbiosis between active soil biology and desirable productive plant communities. This in turn will make more soil minerals available, increase top-soil to support healthier pastures and robust livestock. Demonstrations using 'Proof of Concept' preliminary work undertaken by Dr John Russell will be conducted on several farms and field days held for landholders to see the results after using these methods.</p>
<b>Up2us Landcare Alliance</b>	Upskilling locals in erosion control	<p>Mansfield's soils are highly erosive with dispersion and slaking occurring in many of the sub – soils throughout the region. Many landowners have the capacity to provide soft erosion management techniques such as planting. Erosive soils still remain active particularly in the heads of gullies and along the steeply sided walls. Management of these areas requires expertise and appropriate use of geotextiles such as rocks.</p> <p>Together with an incentive program for erosion control, this project will focus on developing the skills and capacity of earthmoving contractors so that they will develop high quality rock structures that stem the active erosion inherent in our slaking and dispersive soils.</p>
<b>Warby Ranges Landcare Group</b>	Warby Ranges Landcare group soil micro nutrient project	Farmers in the Warby Range Landcare group area feel that there is a knowledge gap in the practical application of soil micro nutrients and the implications of soil micro nutrients levels for soil, plant and animal health. Generally the focus has been on the major elements - phosphorous, potassium and nitrogen. In the past we have run field days on animal health issue such as white muscle disease (selenium deficiency) in sheep and magnesium deficiency in ruminant livestock. Farmers from both high input modern farming and low input biological farming systems would like to see workshops that bring knowledge on these nutrients.

<b>GV Food Cooperative Ltd</b>	Saving our soil E Books	In September 2016 the GV Food Cooperative ran a Soil Health workshop in Tatura. The event was very successful with an 85% positive response to the information presented. As a result, it was felt that if we had an electronic platform to communicate a similar message, more people could access this information and perhaps become involved. An e-book will allow interested landholders to view current bio-dynamic farmers and see exactly what they do, what they grow, and how they sell their produce. The e-book (of about 50-100 pages or about 10 short articles) will be hosted on a website platform that is easily accessible by anyone on their mobile phone or laptop.
<b>Murray Dairy NRM Committee</b>	Managing for soil success	The winter / spring of 2016 has been one of the wettest faced by farmers in a number of years. This has presented significant problems for dairy systems. Soil compaction, pugging and deterioration issues have resulted in lost production, animal health issues and long term damage on dairy farms. The extreme wet weather presents a significant limitation for dairy farmers as there are few opportunities for dairy farmers to 'destock' or move their herd off farm, particularly when the situation has been widespread. This has been exacerbated by the history of intensification across the region with the average herd increasing in size and putting additional pressure on soils and pastures. In addition, there has been a shift away from perennial based systems with an increased level of mixed forage types. This results in disturbed soils from season to season with increased vulnerability to pugging damage during wet conditions. The management and knowledge around soils as well as long term soils planning has been identified as a gap amongst dairy farmers. The ability to manage through very wet and very dry conditions is a skill that needs to be improved as the feasibility of putting in feed-pads or barn style management options are not necessarily the way forward for the majority of farm enterprises. This project is designed to build on previous work to increase knowledge, learnings and assist with decision making on farm through workshops and field days.
<b>Goulburn Murray Landcare Network</b>	Ground truthing – baseline data to measure soil condition changes through regenerative farming techniques	Land managers want to know if the management techniques they are learning and applying to their properties are working for them and are cost effective. This project will enable us to gather baseline data and monitor sites over time looking at soil condition, measuring and quantifying management techniques. This can give land managers confidence to take up regenerative farming methods for the benefit of the region.
<b>Goulburn Murray Landcare Network</b>	Continuing to improve the uptake of sustainable farming practices in the Goulburn Murray Landcare Network	This project is addressing the access to information on sustainable & regenerative farming practices. Land managers want to know about management techniques that will save water, money and build soil on their land. There has been reduced access to extension via government departments in recent years and the feedback from land managers has been positive with regard to what this project has been able to provide over the past few years.
<b>Goulburn Murray Landcare Network</b>	Annual Farm Forum	This project will run a farm forum that will provide information in the form of short workshops that will encourage time poor participants to attend, and it will also allow them to choose which topics they wish to listen to. The forum will provide a wide range of information to cater to the needs of a diverse farming community and will deliver new information from professionals and consultants in different fields.