

# Finding out what's going on underground - the value of soil pits

## Soil testing and assessments undertaken through the Farming for Sustainable Soils Project

**“There’s nothing like doing a soil pit on your own place - finding out what’s been going on down there.”  
(participating farmer)**

One of the core components of the Farming for Sustainable Soils (FSS) Project involves digging soil pits throughout north central Victoria to better understand and manage soil health. Participating farmers were guided through soil pit demonstrations by soils experts on the properties of farmers throughout the catchment.

Local farm owner and Community Facilitator of the Charlton FSS Group Melanie Watts explains the value of this for landholders:

**“We wanted to know more about our soils - that was soil testing and soil assessments, not just looking at the soil chemistry, which a lot of farmers had done before but getting into the soil and digging soil pits and really looking at the soil profile.”**



James Allen is a farmer from the Wycheproof/Glenloth East area and a participant in the FSS Project - he agrees with Mel:

**“We can easily dig up soil to get analysed at the lab, but the best thing was to have the soil scientist on your property looking at the actual soil structure. Understanding soil structure is another thing entirely - having the scientist down in the pit explaining the structure was really useful.”**



**Soil pit with Pyramid Hill FSS Group members and Christian Bannan**

Soils scientist Christian Bannan has worked with almost all of the FSS Groups throughout north central Victoria since 2010, conducting soil pits, soil structure assessments and soil testing to more deeply understand and address soil health:

**“We have dug deep into the problems and identified many of those. Some of those issues would not have been identified, nor addressed without the FSS Project.”**



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The Farming for Sustainable Soils Project is funded by the Australian Government's National Landcare Program and delivered by the North Central Catchment Management Authority in collaboration with local farming communities.



Christian explains that “farmers need to be doing what they see as best practice - but best practice for a farmer is very dependent on the issues with their own soils and conditions on their own farms”.

Farmers in the FSS Project were not only given the opportunity to more deeply understand their own soils, but found benefit in learning about other landholders’ soil health conditions and the challenges they present. Farmer from the Glenloth East area Robert Elder explains:

**“[It was] interesting looking at differing soil types as you went down and the limiting factors and the different soil types across the different plots just on our own property. Every member of the group has soil pits and it was interesting to see across quite a small area how much the soil types varied and the different issues that that raised.”**

**“There’s nothing like seeing your own issues on your own patch [and] not only seeing it on your own patch but going to see it on someone else’s paddock.”**



**Soil pit, showing soil profile**

Doris Bleasing is another soils expert involved in the FSS Project. She explains that soil pits helped understand the unique soil profile of their properties and equip farmers to continue undertaking their own physical and biological assessments in future:

**“Often the groups wanted to look at soil profile, and so we went out and dug soil pits. [...] I would help the farmers learn how to assess the soil physically and biologically out in the paddock. It is important to do soil testing - but it’s also to understand the health of soil by smell and touch, by poking and prodding and feeling the soil in your hands. Being out in the paddock is the best way to do that.”**

For James, digging soil pits is something he will continue to do. “It’s something you have to be looking at every year. You need the means to monitor and evaluate change, improvements. It helps”, he says. Understanding soil structure, as well as soil chemistry - “that’s something we need to do more of in future”.



**Soil pit with Pyramid Hill FSS Group members and Christian Bannan**

