

Snooping into Soils









Jeanie Clark enviroed4all® Warracknabeal © 2016 enviroed4all@gmail.com

PIEFA 2016 Conference Food and Fibre Matters Workshop 7a Snooping into Soils Tues May 3 11 am Ballroom 1







Most food and fibre begins in soil. Most food and fibre depends on soil.

If food and fibre matters – soil matters. If learning is about food and fibre matters – then one of these matters is soil.

2015 = International Year of Soils *Healthy soils for a healthy life* Healthy soils – healthy food and fibre-healthy life.

2016 = International Year of Pulses *Nutritious seeds for a sustainable future.* Nutritious seeds – healthy food and fibre- sustainable soils



soils.enviroed4all® Environmental education for everyone- about soils



"Where food begins" FAO, WSD 2014 Jeanie Clark enviroed4all® Warracknabeal © 2016

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Soils fit the AC Curriculum

eg 2016 IY Soils Wimmera Soil Education Primary Schools Program for rural schools with composite classes and a focus on science.

Learning about soils can fit into each level F-y6 of <u>AC Science</u>:

<u>Understanding</u> –

as a human endeavour- farmers' use of soil **biology** – soils is a need for living things chemistry – soils make-up, reversible/changes? **earth science** – soil = a food/fibre resource physics – gravity has its effects in soil questioning, conducting, recording, analysing, communicating

<u>Other domains</u> that may be covered depending on the activities are : Geography, Arts, IT, Numeracy, Communications Literacy – speaking, listening, reading, writing



Skills -







Snooping into Soils -basic record sheet

Snooping into Soils activities were focussed on National Science Week with samples from children's backyards and simple experiments.

eg Circle results.

 \sqrt{X} suitability for intended use

Numerical result for older levels

Colour match? black brown grey

white vellow red orange

- Close-up?
- Grains one colour / more than one

Clods

- 11 Bits of living things (plants/animals)
- Living things (eg worms)

pH colours? Green

Soil Shake!

Thanks to gravity we can see the :

	Air
Re	Organic matter lying on the top
	Clay as murky water
æ	Silt as a dark layer on top of
8	Sand with the biggest grains.

Water love?

- Droplets soak in soil
- Droplets sit on top of soil
- Droplets slip off soil
- Soil grains ride on top of droplet!



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Purple

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"Soil Selfies" web resource:Sharing soils from around the nation/world Image: Output the source of the sourc

Each "Soil Selfies" has 3 photos of soil at the contributor's place and notes on it: 1 close-up –shows colour and texture,

2 in use – as well as many types of food uses in the collection, there are recreation, health, infrastructure, Nature, industrial and environmental services uses.

3 issues – challenges and how they are managed, so that soils are as healthy as possible into the future to grow food and fibre and maintain our other uses.

Soil Selfies come from Australia, Europe, Pacific and Africa. My aim is to continue to grow this resource, as contributions received What's in it for schools as contributors? English, Photographic Arts, and IT.



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Snooping into Soils -workshop activities

From Soil Selfies collection at http://soils.enviroed4all.com.au/soil-selfies/locations/

1 Soil Selfies display

close-up - colour, texture,

uses,

challenges- issues and managements

On-line egs of 'food and fibre matters'- Wimmera/Mallee grains farms, urban backyard gardens (family farms);

permaculture from Apollo Bay, Mt Waverley and Kenya, Dimboola (xericulture) and Savoie (alpino permaculture)

From **Snooping into Soils National Science Week** activities at <u>http://soils.enviroed4all.com.au/soils-in-stories/</u> spread through this section: PEIFA conference, Wimmera Soil Education project, National Science Week, and *Otherways* sections.

2 Odd One Out3 Looking into soils4 Magnify soil5 Soil Shakes

thinking –oral Sc communication skills, right v best answer observation, modelling

observe soil under a magnifier as 'rain' drops

observe gravity's effect, layers, changes/reversibility simulates?







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Snooping into Soils -continuing to share

Would you like to contribute your/ school soil to the Soil Selfies resource? Then please send me an email <u>enviroed4all@gmail.com</u> (and make this email an allowed sender)

I send out an (irregular) e-news about updates to the Soil Selfies collection. If you are interested, ditto to the above contact. Or connect with enviroed4all on Twitter, Linked-in or Facebook webpage.

Thanks for your participation today. **Please leave your response sheet**





