

Learning at Global Soils Week

*Continuing to explore the 2015 International Year of Soils (IYS)
in this biodiversity and sustainability series by Jeanie Clark*

How important do you see “soil” as being? Did you find that the last article raised your awareness of soil as having a much larger contribution to our lives than we generally give it credit for? Is soil silent in your life?

Global talks

At the Global Soil Week forum in Berlin in April, people from 78 countries worked on how to bring soils to the forefront for its role in sustainability and food security. Discussions focussed on doing this at a global level, in preparation for its contribution to other international forums and decision making processes this year focussing on climate and sustainable development goals.

There are many ideas from the scientists and policy makers here that are relevant to the future but which may take time to filter down; unless, that is, you are there and can share them directly. That is the focus of this article, which is being written from the Global Soil Week forum, where I have been invited to bring an Australian perspective on soils.

Aussie soil selfies

Some of you have contributed to my project for the International Year of Soils (IYS) by way of – “soil selfies”, and thank you for doing so. This forum has given me the opportunity to see and share the soon-to-be online collection as a display and talk to people about its contents. It is exciting to be the link between Aussie people and people from other countries sharing our soils and how we use them – especially overseas.



This project is suitable as a learning activity for any age. The instructions are on the main webpage at <<http://soils.enviroed4all.com.au/soil-selfies/>>, which includes a fill-in form. How does it work? Take your children out with a camera to explore your soil at home, or another site that is familiar to you – perhaps the one you used for the activity in the last article. From that, provide me with three photos and notes to go with them, following the instructions on the webpage. As an educational activity, it involves photography (art), discussion and writing (English)

and email (ITC) for communication about a topic of sustainability.

I prepare the photos for the resource collection with a caption. An example is this set of “soil selfies” from a home educating family at Murtoa:

- What the soil looks like close-up



- What you use it for



- What challenges or management strategies you have for doing this with soil.



If the first photo had been left out, would soil have become ‘silent’ in this use for food growing?

(Soil Selfies by M. Baker, Murtoa, edited by J. Clark (cc) 2015)

Likewise, soil is often silent in, but essential to:

- food security
- climate change adaptation and mitigation
- essential ecosystem services
- poverty alleviation
- and sustainable development.

Food and Agricultural Organisation of the UN, 2015, at <http://www.fao.org/soils-2015/en/>

Twenty-first century soil concerns

This forum gathers a couple of hundred soil scientists from their 60,000 around the world. It turns out that they have been good at sharing their information and concerns in their 'silo', but not as good at getting it out to policy makers and the general public as the meteorologists have been about 21st century concerns for climate. This is being addressed now, especially as policy makers and education organisations are here too.

Here is the list of concerns for soils from today:

Major part of report was assessment of state and trend of threats to soil functions

- soil erosion
- Loss of soil organic carbon
 - nutrient imbalance
- loss of soil biodiversity
 - compaction
 - acidification
 - waterlogging
 - sealing
 - salinization
- contamination

Look at this list with your children.

- Find out the meanings of unfamiliar terms.
- Are there any that surprise you?
- As a whole, what do they say about the importance of soil in sustaining life? ... Oh it doesn't mention that, so just consider food? For each term, explore the problem or threat in order to be able to understand what it does to the ability of an affected soil to produce food. (21st century food security is already a looming concern at the global level.)
- But do not leave it there. Move onto a response for your own soil. Does it have one or more of these problems? Can it be repaired? If there is no problem, what can be done to protect them from any future problems?

For younger children, another way to cover these concepts is through the photos in the "soil selfies" collection. In the set of three, one photo will show a challenge or a management for the soil, from which the above can be introduced. Or consider, wherever you may go, what problems are there.

Ideas for the 21st century

Soil scientists and policy makers are meeting together

for the first time at high level talks. There is consensus that decision-making must become multi-disciplinary, integrated and holistic e.g. as landscapes, not soils; as landscape (catchment) management and stated openly in Sustainable Development Goals, coming up in September.



What skills will be needed to work in holistic groups? The first one is listening skills, the basis for cooperative and collaborative forums. It takes more time than other ways but, in a global world, respect for each other will require this.

How can we prepare children for such a future? Home educators probably already are. When parents decide with their child(ren) on an activity or project, this uses such skills. At a conceptual level, flexible, negotiated planning provides opportunities for listening, reflection and sharing strategy development between stakeholders to achieve integrated, win-win outcomes.

Changes in attitudes are needed too, to move:

- From a 'silo' mentality to a 'systems' one.
- From replacing resources to repairing them.
- From being consumers to conservers.
- From production to protective economies.

We need to be able to look at what we have and are doing on all scales, and from inputs to mechanisms and implications. Growing a food garden with your children can contribute this thinking. Create a concept map with soil on the left and the food on the right and put linkages in between. Add to this as you grow the food. See the complexity grow. See why soils are important and how it is tied with how land is managed.

Soil stories

A literacy project complementary to "soil selfies" and, based in Belgium, seeks simple personal statements of how people, including children, from all over the world see soil in their lives; in other words, what soil gives to their lives. These statements, together with the person's name or initials, year level (if a child), town name and country can be sent to soilstories@ovam.be. These statements will be shared with the world in two ways: firstly, to create "Soil Stories", a new Flemish-based website for the IYS2015 and, secondly, they will be collated into a presentation at the World Expo 2015 in Milan in September. They could be used to reflect on new soil learnings.

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