

European Soil Bureau – Working Group 4

Soil Awareness and Education

The focus of this meeting is to establish an action plan for the development of measures/programmes/initiatives to raise awareness of the importance of soil across European society (i.e. policy makers, general public, universities, schools, industry, etc.).

If you have any issues regarding the mandate of the working group (attached), please let me have your comments in advance of the meeting so we can collate and discuss with the group.

Agenda for kick-off meeting (26/27 05 2009)

Apologies for absence: Federic Darboux, INRA, France

1. Opening remarks / welcome

Arwyn Jones gave an overview of the requirements of DG Env, primarily and other DGs on the JRC activities relating to soil awareness and education. These included the following EU environmental policies:

- Soil Thematic Strategy
 - European Data Centre
- Plant Protection Directive
- Nitrates Directive
- GMES
- INSPIRE
- Kyoto Protocol / Emission Trading
- EU Global Development Policies
- Environment and Health Strategy
- Flood Risk Management
- Common Agricultural Policy
- Forest Focus
- Urban Thematic Strategy
- Renewable Energies & Energy Efficiency
- Sustainable Use of Natural Resources Strategy
- Waste Framework Directive

Arwyn highlighted the main objective of the working group:

“To establish an action plan for the development of measures / programmes / initiatives to raise awareness of the importance of soil across European society (i.e. policy makers, general public, universities, schools, industry, etc.)”

He also highlighted some text (Articles 15 and 16 in the 2006 communication of the European Soil Directive) that may make knowledge exchange legally binding. WG4 has a 2 year commitment from ESN and the intention is to hold two meetings per year.

2. Discussion of the mandate (with any comments emailed prior to the meeting to RC)

WG4 Mandate:

- *To review current soil education and awareness programmes and their accessibility by the general public.*

- *To identify which stakeholder groups/ policy makers / age groups are not receiving suitable information, with a view to ensuring that soil quality and protection is achieved across Europe*
- *To develop a resource base of publicly available educational material (multi-lingual) on the role of soils in society.*
- *To coordinate, promote and provide support materials to soil awareness activities across Europe. For example, through communication and workshops with other networks (e.g. ENSA) and societies (National Soil Science Societies and Education Forums).*
- *To develop a European knowledge transfer project proposal for submission. E.g. cost action*

The mandate was accepted by all members of the working group with no specific amendments.

3. Overview of activities by members of working groups:

a. Ireland – Rachel Creamer

Main interest in soil education, stakeholder groups and policy awareness with experience in outreach activities for each of these groups. Highlighted the lack of information available for the different groups within Ireland.

b. Scotland – Willie Towers

Willie gave an overview of the activities undertaken by Macaulay Institute Scotland, with special interest at policy level engagement and development of information for targeted stakeholder groups e.g. gardeners, land planners etc.

c. Hungary – Erika Micheli

Erika gave an overview of her activities specifically to promote the knowledge of soils and soil pedology through initiatives such as summer school training camps sponsored by JRC and in 2009, FAO. Production of the soil atlas and associated calendars etc.

d. Italy – Pandi Zdruli

Pandi gave a summary of activities occurring within Italy and Albania. Within Italy there are two national soil science societies active in education and awareness activities; Società Italiana della Scienza del Suolo (SISS, www.scienzadelsuolo.it) and Società Italiana della Pedologia (SIPe, <http://www.societapedologia.it/>). In Albania, while the national society is not very active for political and economic reasons it did host “Earth Day” to highlight the protection of soils. Suggestion for a Balkan Soil Museum or Mediterranean Soil Museum.

e. England – Stephen Hallett

Steve provided an overview of the soil education work being conducted in England through the development of a curriculum based website – www.soil-net.com funded by Defra – Department of Environment, Food and Rural Affairs, U.K. Soil net provides an interactive web based education facility for ages 5-16 yrs. Providing teachers with teaching materials, interactive white board downloads, activity sheets and computer based quizzes. This facility was offered as a basis for a European educational resource.

f. Germany -Olaf Duewel

Olaf provided an outline of the work of BGR in soil outreach, with specific examples of soil exhibition events, education experience of soils in schools, by invitation to school classes to explain about the importance of soils. BGR are currently increasing the awareness of soils in the public and at a policy level. At a national level there are two soil societies with an interest in soil education; Federal Soil Association of Germany Section 5: Job and education and German Soil Science Society WG: Soil in Education and Society.

g. Slovakia - Beata Houskova

Beata gave an overview of soil education activities in Slovakia from primary level through to University of the 3rd Age. A summary of the project INFOVEK which aims to bring internet into every school with a range of different topics for educational process (soil partly involved via environmental protection, biodiversity in soil via biology, no special topic concerning soil). Also highlighted the interest from some stakeholder groups such as gardeners.

h. ENSA – Gabriella Broll

Gabriella represented the activities on soil education in Germany and the European Network on Soil Awareness (ENSA). These activities include a museum based at Osnabruck to promote the education and awareness of soils. In addition the German Soil Science Society promote education of soils through development of school text books, lesson plans, short films and additional outreach publications such as “soil of the year” which each year provides an overview of a specific soil type in Germany, it’s importance and potential functions associated with it. Gabriella also provided a link and summary of the ENSA activities to provide information on soil protection at European and International levels. ENSA will work with ELSA (European Land and Soil Alliance, www.soil-alliance.org), which provides a website (located in Osnabruck, Germany), which can be used for the exchange of information etc. and can act as “umbrella” for national websites.

i. Slovenia – Franc Lobnik

Franc gave an overview of his research and activities in developing an e-learning platform for the teaching of soil and soil-related subjects (www.let-group.com). To reach policy level a conference was organized in Slovenia “Bridging the Gap” which invited a range of key stakeholders, policy makers, journalists etc to discuss the concept of soil and environmental awareness.

4. Analysis of gaps in outreach and awareness

The delegates prioritised key areas to target their activities, and subsequently identified the range of networks that would facilitate outreach and awareness in those areas. The meeting then moved on to identify the different methods used to communicate to those different audiences and potential key subjects that would capture the public imagination.

Three keys areas were highlighted from the presentations given in the individual presentations above, these were; education, policy awareness and public stakeholder groups. The following details potential outreach/education gaps for the three key areas:

Key Groups for targeted awareness and education outreach:

- **Education**
 - Primary
 - Secondary
 - Tertiary Education
 - Life long learning
 - Summer schools

- **Policy awareness at European and Member States**

- National Agencies
- DG Env soils
- Policy- DG's
- Environmental Agencies

- **Public Stakeholder groups:**

- Gardeners
- Land based industries
- Land Planners
- Archaeologists
- Natura 2000/National Parks
- Urban areas
- Cultural aspects

In the gap analysis members of the working group proposed possible networks which could be used to raise awareness, the list below provides a list of European-wide networks, in addition national societies should be contacted to provide member state level awareness.

Networks:

- Teachers associations
 - Earth science teachers association
- National Soil Science Societies
- ENSA/ELSA
- World Association for soil and water conservation
- ESBN
- IUSS soil education and public awareness commission
- ESSC
- Geoparks
- Euro geo surveys
- Farmers associations
- European land owners association
- Mountain research initiative
- Ecology societies

Tools for Awareness and Education

Tools for awareness and education were listed for each of the key areas, these may overlap in some cases (Table 1). These outreach tools are generally already developed at a local level but need to be consolidated to achieve a European wide awareness. Members of the working group are asked to add to this list in communication with national societies, networks and other soil scientists interested in education and outreach in each member state.

Table 1 Range of methods to link with agreed key areas

Education	Policy	Stakeholder Groups
Posters	Knowledge exchange programme (secondment between science and policy) (3-6 months)	Events – best practise guidelines - Dramatic message (positive influence of soils)
School books	Ministerial shadowing (2 days)	Targeted media – Linked to industry/culture/national geographic
Curriculum based information	Briefing notes	Untargeted media (bigger message) – international press – Radio/television (euronews) – <i>National societies to have 2 media reports a year</i>
Classroom visits	Workshop for DG delegates on soil education, provide a case study for each DG.	Soil of the year – example from Germany
School science week activities - school, region and national activities		<i>Bench mark soils initiative – each country identifies key soils – reference sites</i>
Websites e.g. www.soil-net.com www.let-group.com www.teachernet.gov.uk/ www.infovek.sk		
Powerpoint presentations		
Interactive white board activities		
E-learning		

Key subjects to enable awareness and education outreach:

Topics:

- i. Loss of habitat
- ii. Food security
- iii. Climate change
- iv. Land management
- v. Land use change
 - Soil Functions
 - Soil Threats/Protection

- Soil and landscape diversity - differences

5. Selection of a Working Group chairperson

Willie Towers – Macaulay Institute, Scotland was nominated chairperson of the working group by Rachel Creamer and agreed by all members. Rachel Creamer was appointed as vice chair.

6. Identification of key tasks within the mandate to working group members (2 members at least should be assigned to each task and an update provided at each working group meeting).

See Table 2

7. Outreach Opportunities

- a. ***Summer School on Soil Survey and Land Management***
(27-31 July, 2009 Szent István University (SZIU), Hungary)

One or two members of the working group are asked to attend this summer school and provide a lecture on soil protection, soil functions and their potential threats.

- b. ***1st Meeting of the European Network Soil Awareness (ENSA)***
(Osnabrück, Germany from 27-29 September 2009)

A sub-group meeting of the working group will be held during this meeting (Tue 29th Sept 2009). All members are asked to attend this meeting to allow development of contacts with the ENSA network, DG Env representatives will also be asked to join the WG meeting.

Willie Towers (chairperson of WG4) and Rachel Creamer (vice chairperson) have been invited to present an overview of the potential activities and role of the Soil Education and awareness working group of the ESNB at the ENSA meeting.

8. Discussion on the opportunity and requirement of a European knowledge transfer project - concept note of proposal and lead organisations in preparation of proposal.

This will be a continuous process through development of a strategy to present to DG Env.

Task List: WG4 (26/27th May 2009)

Table 2 Agreed Task list for WG4 members

Subject	Task	Person Responsible	Date
	Meeting minutes	RC	June 09
Overview for DG Env	Meetings summary report to give to DG Env	(WT, RC and AJ)	June 09
Gap Analysis	Complete networks list	All/ESBN	Oct 09
Gap Analysis	Create directory of resources – host on ESBN web portal	PP (JRC) and SH	Start of August 09
Gap Analysis	Pilot Test of directory	All WG members	August 09
Gap Analysis	Sept plenary/ENSA – present the directory on the web portal	RC/WT/AJ	Sept 09
Overview for DG Env – ENSA meeting 27-29 th Sept 2009	Prepare a position paper from meeting outcomes - to go to DG Env for Sept	GB, WT, RC, AJ	August/Sept 09
Key Topics for outreach	Framework of key thematic topics	WT (ESBN)/SH	December 09
Examples of how to solve the problem of the gaps	Curricula maps	SH	
Examples of how to solve the problem of the gaps	Best practise guidelines	Events – OD Soil of the Year - GB Publications - Targeted publications - WT Web resources - SH Educational Resources - BH E-learning – FL	
Policy awareness	Workshop with DGs - case studies providing examples of soils in each DG policy area	All	
Strategy Document – for the commission/member states	Development of new materials as required		
Strategy Document	Translation of new/existing materials		
Strategy Document	Lingual and cultural issues considered		
Strategy Document	Gaps existing		
Strategy Document	Economic costings		
IUSS World Conference	Abstract to be submitted to soil education session	WT/RC – send to all	