
Preface

Imagine the land of the planet Earth, but without soil. A bare rock and practically nothing on top of it. Thus, nothing that would enable a plant's root to search for water and nutrients, no living space for myriads of organisms, no moles and earthworms, and no tiny bacteria—nothing that makes our shoes dirty. No soil at all. What a desert!

The air, the water, and the soil. With all due respect, it sounds like the Holy Trinity. Without air, we can live only a few minutes. We can survive a few days without water. Without soil and its products, we would die of hunger within a few weeks.

Soil is a space where life meets its counterpart, the mineral component of this planet. In general, people know that soil is need for plants to grow and thereby for food or timber to be produced. The chemical and physical properties of soils are reflected in fertility—a unique, and complex property essential for the production of the necessary quantities of healthy food as well as the growth of woods and other biomass. We enjoy the food, and its diversity and quantity. To be precise, not all of the Earth's inhabitants enjoy it to the same degree. For many people it is a luxury, as they go to sleep hungry each evening.

However, food is not the only way we benefit from soil. Soils perform key ecosystem services and functions that are crucial for the existence and diversity of terrestrial ecosystems. In addition to providing media for plant roots, soils decompose plant residuals, store and release carbon that is then again available for photosynthesis, and enable the circulation of matter, especially nutrients; soils break down and neutralize harmful substances, filter rainfall, and thus supply sources of drinking water. Soils are a unique habitat for a remarkable number of different organisms. They are also a source of raw materials and store the natural and cultural heritage of the past, etc. The list of functions and services is long and varied.

Soil, or the "skin of the Earth," as some of soil scientists refer to it, appears in many forms showing different characteristics, having a range of capacities, and has variable suitability for plant growth or other uses. The differences in forms and soil types basically determine the diversity of our terrestrial ecosystems and the range of diverse natural habitats. It is due to soils that our eyes can enjoy trees, birds, meadows, butterflies, wheat fields, forests, and deer—everything that lives in and above the soil. The biodiversity of our terrestrial ecosystems stems from the diversity of the soils.

We could go on, but let us be brief: no more no less, the soil is the fundament that enables virtually all land-based life.

And if this is true, why does the general public know so little about the soil? What does mankind gain from the soil and how does it serve us? What is its role in terrestrial ecosystems? How do different soils contribute to the cultural landscapes that we like and are proud of, and, on the other hand, how do they contribute to the valuable natural landscapes we are trying to protect? Although we are well aware of the importance of clean air and water, the importance of soils for the life of this planet is not sufficiently recognised. What is happening with the Earth's soils, how fit they are? Why do we know so little about soils? Or better put, why do we treat soils so badly?

To the typical modern human, soils are self-evident and above all an overlooked resource beneath our feet. People are mostly not aware how soils benefit us and what there role is in

ecosystems. In general, we do not recognise them as being valuable. We are not aware that they are not an endless resource. Millennia are required for their formation, and it is important how we treat them.

Yes, we, the “soil people,” can talk about soil for hours. There is a good chance many of you remember Dr. Dick Arnold saying “Let’s talk soils.” The more we know about soils the more we are tempted to discuss them. But how successful have we been in passing on this information regarding the importance of soils to politicians, decision-makers, and other nonsoil people who depend on soils, as does everyone else? Not very successful! But we need to be.

We are faced with the extremely rapid growth of the world’s population and therefore of the global needs and pressures on soil resources. At the same time, we are becoming convinced of the consequences of climate change and in large-scale land degradations. In order to mitigate pressures and to respond to the threats to soils adequately, it is necessary to raise awareness of the importance and role of soil in civil society and especially within decision-making centres. We need to better advertise the role and importance of soil in order to achieve food security for successful adaptation to and mitigation of climate change, the maintenance of ecosystems, and sustainable development.

It is high time to design effective policies and measures to achieve sustainable management and better protection of our soil resources.

These and many more other reasons convinced the United Nations to declare 2015 the International Year of Soil and December 5, 2015, the World Soil Day at the 68th General Assembly, held on December 20, 2013.

Slovenia is not a large country, but we, Slovenians, share the same planet with other nations; soils globally are as important as soils in Slovenia, and we believe the opposite also holds true.

This book is a part of the World Book Soil Series initiated by the IUSS. Additionally, it is a small contribution to the UN—FAO and Global Soil Partnership initiative, as well as part of raising awareness of the world’s soil and soil protection policies.

Ljubljana, Slovenia

Borut Vrščaj
Blaž Repe
Primož Simončič

The Soils of Slovenia

Vrščaj, B.; Repe, B.; Simončič, P.

2017, XXVI, 216 p. 212 illus., 209 illus. in color.,

Hardcover

ISBN: 978-94-017-8584-6