

Looking at soils in everyday life

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Your study of soils can be significantly enriched and deepened if you take the time to consciously try to become aware of the myriad daily encounters with soils and their far-reaching influences that often go unnoticed by most people in their everyday lives.

Observe and engage with different types of soils through gardening

One of the most direct and accessible ways to observe and engage with different types of soils is through the rewarding activity of gardening. When individuals take the time to plant a variety of flowers or vegetables, they can closely examine the soil composition as well as its texture and colour, gaining invaluable information about what makes each type of soil unique. Healthy soils are typically characterized by a dark hue and richness in organic matter; these indicators suggest that the soil is not only alive with

beneficial microorganisms but also capable of providing a good supply of essential nutrients that plants need to thrive.

In recent years, home gardening has experienced a significant resurgence in popularity, a trend that can be partly attributed to the COVID-19 pandemic. During this challenging time, many people turned to gardening as a means of ensuring food sustainability while also finding solace and mental well-being in the process. This renewed interest in cultivating one's own garden has further emphasized the critical importance of utilizing healthy soil for plant health and productivity.

To promote and enhance soil quality, gardeners are encouraged to incorporate amendments such as compost or organic fertilisers into their gardening practices. By thoughtfully adding these enriching materials,



Figure 1: Explore and interact with various soil types by participating in gardening activities.

gardeners can significantly improve the overall health of the soil, which, in turn, leads to enhanced plant growth and ultimately a more bountiful harvest. Through these mindful gardening efforts, individuals are not only able to cultivate beautiful and nutritious plants but also contribute to the health of the ecosystem.

Note the different layers of soil that you encounter as you dig deeper

When you dig a hole to plant a tree, perhaps in your garden, or to set a fence post securely in the ground, take a careful moment to observe and note the different layers of soil that you encounter as you dig deeper. When you do this, pay particular attention to how the soil from each layer looks and feels different in terms of texture, colour, and composition, perhaps even noting the smell or moisture content. Furthermore, if you happen to pass by a construction site, seize the opportunity to pause for just a moment and observe the various horizons that are exposed by the excavations taking place. This can give you information about the stratification of soil at that location. Additionally, if you are fortunate enough to be flying during daylight hours, take a moment to look out the window and observe the stunning shapes and patterns of individual soils in ploughed fields, especially if your flight occurs in the vibrant seasons of spring or autumn. This focused observation can lead to a greater appreciation and understanding of the complex and vital role that soils play in our environment.

Closely examine the fine sand that has been deposited on banks or the bottom of the stream

Soils can provide crucial clues that help you to better understand the natural processes that are continuously occurring all around you, often unnoticed. For instance, if you take a moment to visit the area down by the stream, you can greatly enhance your observation skills by using a magnifying glass to closely examine the fine sand that has been deposited either on the banks or at the bottom of the stream itself. When you take a closer look, you might discover that this sand contains various minerals that are not typically found in the local rocks and soils, but rather, these minerals may have travelled from many kilometres away upstream, transported by the flowing water.



Figure 2: Take note of the different layers of soil that you encounter as you dig deeper.

Observe the mud that is clinging stubbornly to the tyres and fenders

In addition, when you find yourself washing your car after a drive, pay attention to the mud that is clinging stubbornly to the tyres and fenders. Take a moment to observe whether this mud is of a different colour or has a different consistency compared to the soils that are typically found near your home. The dirt (or soil) that is stuck to your car may indeed offer hints about where you have been driving, serving as a record of your journey.

Moreover, it is interesting to note that forensic investigators often turn to soil scientists for their expertise. These experts can play a crucial role in investigations to locate crime victims or help establish guilt in various cases. They do this by meticulously matching the soil that clings to shoes, tyres, or tools with the distinct characteristics of the soils at the crime scene. This technique can be integral to



Figure 3: Notice the mud that is tenaciously attached to the tyres and fenders.



Figure 4: Pay attention to the soil while participating in outdoor activities such as a safari drive.

the investigative process, providing significant insights that may help solve crimes.

Observe soils during recreational activities, such as hiking

Soil can also be observed during a variety of recreational activities, such as hiking through scenic trails or visiting local parks that showcase the beauty of nature. While engaging in these activities, individuals often could closely examine the diverse characteristics of different soil types that lie beneath their feet. One significant concern that may arise during these outings is soil erosion, which is a visible issue frequently encountered in many natural landscapes. Observing bare patches of soil on slopes or along well-trodden trails serves to illustrate the profound effects of both weather events, such as heavy rains or strong winds, and human activity, including foot traffic and land development, on the stability and health of the soil. These observations can enhance our understanding of ecosystem dynamics and the importance of preserving our natural environments.

Look closely for those small, often unnoticed bits of soil that may still be clinging to the bottom of the stalk

Other examples of soil hints can be found even closer to home in your own kitchen or

at your local grocery store. The next time you bring home a fresh bunch of celery or a crisp head of leaf lettuce from the supermarket, take a moment to carefully examine the produce. Look closely for those small, often unnoticed bits of soil that may still be clinging to the bottom of the stalk or nestled in between the leaves. This attention to detail not only helps you appreciate the connection between the food you eat and the earth it comes from, but it also serves as a reminder of the natural environment from which these delicious vegetables are harvested.

Opportunities to observe the fascinating world of soils in our daily lives can be found in a variety of contexts, ranging from the vast and expansive landscapes of remote areas to the intricate and intimate details seen in our immediate environments. As you embark on the journey of exploring and learning more about the complexities and characteristics of soil, you will inevitably notice and appreciate a greater number of examples of their significant influence and role within your surroundings. This heightened awareness will allow you to connect with the natural world in a deeper way, revealing how soil contributes to various environmental processes and affects the ecosystems and communities around you.

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