



The landscape of Wageningen as an inspiring teaching environment for future environmental scientists

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Practical field work is an essential component in training future soil scientists. This is facilitated when a wide variety of geological materials geomorphological phenomena and soil patterns are within reach.

One of the leading universities in soil science in the Netherlands, Wageningen University, was founded some hundred years ago in the small city of Wageningen because of the rich variety of soils and landscapes in its vicinity. Being located in the central part of the Netherlands, its region is famous because here Late-Pleistocene and Late-Holocene deposits meet. Wageningen is located on the slope of an ice pushed ridge which dates from the Saalien ice age, bordering a glacial tongue basin. The ridge is mainly composed of pushed coarse grained fluvial deposits. In the Weichselien ice age cover sands have been deposited on the sides of this ridge. During the Holocene the ridge was eroded on the southern side, where the river Rhine has cut into the older deposits and deposited mainly fine grained fluvial deposits. Peat formation took place in the lower parts of the basin. In addition this region has been inhabited by people, who have worked, and fertilized the soil, creating a thickened A-horizon in some locations around Wageningen. This geological setting has created a palette of different sedimentary deposits which serve as mother material for a variety of soil types like podzols, brown forest soils, , fluvial clay to loamy soils, plaggen soils and peat soils.

In our education we frequently use the soils in the surrounding as a teaching environment for our students. They are sent out to use all their senses and look, feel, hear and sometimes even taste the soils. They use these impressions to describe the soils and understand why the soils are on that specific place in the landscape where we find it. We feel students benefit from this playground in our backyard, because, even though students work more and more in an individual and virtual environment where they sometimes can do courses on physical processes in earth science from behind their computer screen at home, field courses are a component of curricula that cannot be replaced. Students from a wide variety of backgrounds (ecology, planning, soil science, land management, hydrologist) meet this landscape every year. Field courses, being either excursions or fieldwork courses, are of vital importance to bring the real world to life in the heads of the students.