

## A History of Soil Science Education in the United States

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The formal study of soil science is a fairly recent undertaking in academics. Fields like biology, chemistry, and physics date back hundreds of years, but the scientific study of soils only dates to the late 1800s. Academic programs to train students in soil science are even more recent, with the first such programs only developing in the USA in the early 1900s. Some of the first schools to offer soil science training at the university level included the University of North Carolina (UNC), Earlham College (EC), and Cornell University. The first modern soil science textbook published in the United States was "Soils, Their Properties and Management" by Littleton Lyon, Elmer Fippin and Harry Buckman in 1909. This has evolved over time into the popular modern textbook "The Nature and Properties of Soils", most recently authored by Raymond Weil and Nyle Brady. Over time soil science education moved away from liberal arts schools such as UNC and EC and became associated primarily with land grant universities in their colleges of agriculture. There are currently about 71 colleges and universities in the USA that offer bachelors level soil science degree programs, with 54 of these (76%) being land grant schools. In the 1990s through the early 2000s enrollment in USA soil science programs was on the decline, even as overall enrollment at USA colleges and universities increased. This caused considerable concern in the soil science community. More recently there is evidence that soil science student numbers may be increasing, although additional information on this potential trend is desirable. One challenge soil science faces in the modern USA is finding an academic home, as soils are taught by a wide range of fields and soils classes are taken by students in many fields of study, including soil science, a range of agricultural programs, environmental science, environmental health, engineering, geology, geography, and others.