When Emil Truog was born on a farm in Independence, WI, on 6 Mar. 1884, the study of soil science was in its adolescence. Based on soil concepts developed by a German chemist, Justus von Liebig, it was only during the final third of the 19th century that scientists began studying samples of soil in laboratories, greenhouses, and outdoor plots. Considered at that time to be something to be used and replaced, soil was rarely examined below the level of normal tillage and was thought to be mainly the product that resulted when disintegrated rock such as granite, sandstone, and glacial till weathered.

However, by 1870, Vasily Vasil’evich Dokuchaev—commonly regarded as the father of pedology—had revised that concept. Establishing the Russian school of soil science, he developed a new model of soils as independent natural resources, each with distinct properties resulting from a unique combination of climate, living matter, parent material, relief, and time.

It was while that early history of soil science was being written that Emil Truog planted his roots deep in the Wisconsin soil of his family farm where he grew up the youngest of 10 children of Swiss immigrant parents. Like other farm children, young Emil went to school six months of the year and worked with his family on the farm for the other six. After beginning his high school education at Independence High School, a physics teacher helped him to see how science could be applied to farm work. Because Independence High School offered only a two-year program—with the encouragement of that teacher—he enrolled at Arcadia High School where he graduated in 1904 as valedictorian.

Taking a year off from his schooling to work on the farm, he enrolled the following year in the agriculture program at the University of Wisconsin-Madison. Recalling that his father always said, “On new land, I never failed,” he remembered that the land inevitably always did fail. And while he was still in school, Truog began to wonder what it was that made land unproductive.

Although soil acidity could be corrected by applying lime, it was hard to know how much lime to apply because it was hard to determine acidity. Because Truog was on acidic soil—as were 60% of Wisconsin farms at that time—it was to develop an easy test that any farmer could use. By 1912, he had developed the Hellige–Truog pH Test that is the basis for the acidity tests still in use today. In 1949, George D. Scarseth, who was then director of research for the American Farm Research Association, said, “Probably no one person in our country has done more for the man on the land than Emil Truog.”

Agronomic Science Foundation

Truog Award Carries on Pioneering Soil Scientist’s Legacy of a Better Agronomic Future

When Emil Truog was born on a farm in Independence, WI, on 6 Mar. 1884, the study of soil science was in its adolescence. Based on soil concepts developed by a German chemist, Justus von Liebig, it was only during the final third of the 19th century that scientists began studying samples of soil in laboratories, greenhouses, and outdoor plots. Considered at that time to be something to be used and replaced, soil was rarely examined below the level of normal tillage and was thought to be mainly the product that resulted when disintegrated rock such as granite, sandstone, and glacial till weathered.

However, by 1870, Vasily Vasil’evich Dokuchaev—commonly regarded as the father of pedology—had revised that concept. Establishing the Russian school of soil science, he developed a new model of soils as independent natural resources, each with distinct properties resulting from a unique combination of climate, living matter, parent material, relief, and time.

It was while that early history of soil science was being written that Emil Truog planted his roots deep in the Wisconsin soil of his family farm where he grew up the youngest of 10 children of Swiss immigrant parents. Like other farm children, young Emil went to school six months of the year and worked with his family on the farm for the other six. After beginning his high school education at Independence High School, a physics teacher helped him to see how science could be applied to farm work. Because Independence High School offered only a two-year program—with the encouragement of that teacher—he enrolled at Arcadia High School where he graduated in 1904 as valedictorian.

Taking a year off from his schooling to work on the farm, he enrolled the following year in the agriculture program at the University of Wisconsin-Madison. Recalling that his father always said, “On new land, I never failed,” he remembered that the land inevitably always did fail. And while he was still in school, Truog began to wonder what it was that made land unproductive.

Although soil acidity could be corrected by applying lime, it was hard to know how much lime to apply because it was hard to determine acidity. Because Truog was on acidic soil—as were 60% of Wisconsin farms at that time—it was to develop an easy test that any farmer could use. By 1912, he had developed the Hellige–Truog pH Test that is the basis for the acidity tests still in use today. In 1949, George D. Scarseth, who was then director of research for the American Farm Research Association, said, “Probably no one person in our country has done more for the man on the land than Emil Truog.”