

**Soil Science Society of America (SSSA)
Certified Professional Soil Scientists (CPSS)
And
Life - Long Learning**

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www.soils.org/certifications

The Soil Science Society of America's (SSSA) Certified Professional Soil Scientist (CPSS) Program sets the standards that define the profession of soil science. CPSS is a voluntary program that helps to protect the public and the profession by only certifying individuals that can meet the standards. SSSA also provides continuing education for professionals who work with soils directly as a soil scientist or indirectly in a related profession.

SSSA is a progressive international scientific society that fosters the transfer of knowledge and practices to sustain global soils. Based in Madison, WI, and founded in 1936, SSSA is the professional home for over 6,000 members and 700 certified professionals dedicated to advancing the field of soil science. The Society provides information about soils in relation to crop production, environmental quality, ecosystem sustainability, bioremediation, waste management, recycling, and wise land use.

CPSS is a voluntary certification process by which SSSA grants recognition to an individual who has met the predetermined standards. Certification identifies professionals with the expertise that is needed by the client. The certification standards are evaluated through four areas: exams; experience; education; and ethics.

Exams - the knowledge level is measured through examination covering six competencies: soil – chemistry and mineralogy; fertility and nutrient management; physics; genesis, morphology and classification; biology and ecology; and land use management. The fundamentals in soil science

exam is required for certification. It covers these six areas through multiple choice questions. Licensing programs in certain states require the same exam plus the professional practices' exam. The professional practices exam uses scenarios where a situation is described and information is provided that must be used to answer the related multiple-choice questions.

Experience and Education – the amount of experience depends on the level of education. An applicant must have at least a Bachelor of Science (BS) degree in soils or closely related field with a minimum of five years of experience. The BS degree must contain at least 15 semester credits in soils course work including at least seven credits in upper level courses. Three years of experience is required if the individual has a MS or PhD.

Ethics – every CPSS must sign and agree to adhere to the Code of Ethics.

Some of the value points of professional certification include creditability; opportunities; motivation; ability; and validation.

Credibility – a client has no other assurance that someone is qualified to perform the work unless they are professionally certified or licensed. Certification sets you apart as a go-to professional that is knowledgeable, experienced and ethically bound to follow the performance standards outlined in the code of ethics. Professionalism is identified as the number one reason that certified professionals became certified and continue to maintain it.

Opportunities – some jobs require it or expect an individual to attain certification otherwise the position is not available. Advancement potential is also more available to someone who is certified.

Motivation – we all face times when we need some encouragement to continue our learning when there are many competing factors for our time or do the right thing when the easier path seems shorter. Certification requires continuing education to be earned to maintain the credential. It also requires that each professional sign and adhere to the code of ethics. So, when temptation calls as it will, certification can help keep professionals on the right path.

Ability – employers who have tracked certified and non-certified professionals' performance say that certified outperform non-certified. As

an employer, this would be a motivating factor to employ and support certified professionals.

Validation – this one is only provided by a third party like a certification program. Someone can say they are a soil scientist but only the SSSA (professional peers) will say you are a “Certified Professional Soil Scientist”. Validating the individual’s capabilities by an independent third party of professional peers.

Licensing is the mandatory version of certification and is administered by state governments. There are several states that have soil science licensing programs where SSSA provides the exams. You cannot practice soil science without the license if you live and work in a state that requires it. The purpose of licensing is similar to certification but the emphasis is on protecting the public from those who are not qualified to be a soil scientist by preventing them from practicing. You can determine if your state has licensing or just certification by visiting the SSSA web site:

www.soils.org/certifications

Life-long learning is a key component of the CPSS Program through the continuing education requirements. Every two-years a CPSS must earn at least 30 hours in continuing education related to soil science and being a professional. They continue to grow their knowledge and prove their commitment to the profession. SSSA is a resource for and provides opportunities in continuous learning both in person and online, self-paced events. There are numerous soil science related topics in the SSSA online library of self-paced learning modules: www.soils.org/education Whether you are working directly or in a related profession encountering soils consider becoming a CPSS and utilizing SSSA programs in support of your career.

Being a CPSS – meet DeAnn Presley, CPSS

A little about me: I’m a professor of Agronomy at Kansas State University and I teach courses and perform research about soil management. I extend educational opportunities to onsite wastewater professionals twice a year through trainings offered by the Kansas Small Flows Association on the subject of evaluating soil profiles for suitability for wastewater systems.

Becoming a certified professional was important to me for three reasons. First, I frequently work with other professional scientists, such as Professional Geologists (PGs) or Professional Engineers (PEs) and so I feel it is important for soil scientists to also achieve similar levels of formal professionalism in our chosen field. Second, as was stated earlier, 700 of the 6000 SSSA members are CPSS, so becoming certified can set you apart from other soil scientists and might be the deciding factor when a client is choosing between consultants to hire for a project, for example. My state (Kansas) doesn't have a licensing program for soil scientists, so when I meet another CPSS who lives in Kansas, I take notice, because the fact that they have chosen to go the extra mile to become a CPSS lets me know that they have an exceptionally strong background in soil science and have put in the required number of years in the profession to become certified. Finally, maintaining my CPSS credential requires me to complete continuing education including an ethics course every two years. I mostly accomplish this by attending such events as seminars at professional meetings, like NOWRA, any of the scientific talks here at NOWRA would be eligible for me to use towards my 30 hours of continuing education that I need to report every two-years.

After becoming a CPSS, I realized the value of being part of a formal network of highly trained professionals. I can't take on every project that comes my way but I can refer potential clients to the CPSS website and trust that the others listed there are trained and dedicated to maintaining their certification. I have also reached out to other CPSS's with my own questions, wanting to bounce an idea off someone or just ask for a second opinion. Being a part of a trusted network of professionals is another ongoing value that I believe the CPSS program offers to me.

Thank-for your time and attention and allowing us to be part of the NOWRA conference.