

Don't Let Skills Go to Waste

When people ask me what I do as an agricultural engineer, my answer varies a bit, depending on who is asking. Sometimes I say conservation engineering, sometimes I say I work on feedlots and dairies, and sometimes I just say that I work for the government. In truth, though, I work with waste. I am currently an agricultural engineer on a nutrient (a.k.a. waste) management team for the USDA-NRCS. Stationed out of Brookings, South Dakota, I have the opportunity to work with livestock producers in the state who have a need for engineering assistance to better manage the waste products generated by their livestock feeding operations.

While it is a given that there are times when my job stinks (literally), I still find it rewarding! My job gives me the opportunity to improve an operation for a producer while simultaneously improving the environment in which we all live. Being an outdoor enthusiast, I find it satisfying to know that my daily work is improving water quality. Further, my job encompasses many of the different skills that I gained through my earlier study and work as an agricultural engineer.

Becoming a licensed Professional Engineer was something I aspired to from early on in my studies at Iowa State University. I took the FE exam back then, which in hindsight was a good decision because it's never any easier to complete that first step than at the culmination of a college career. I began my full-time work with the NRCS in Iowa, starting out in the southwest part of the state working on flood control dams. I had a supervisor who was licensed in three states at that time, and he provided mentoring that convinced me that being a licensed PE would be beneficial for my career and would provide a way to show commitment to my profession.

As my work took me into South Dakota, I reached the experience level that was needed to take the PE exam. I knew that I would attain this level in 2006. So in late 2005, I began to investigate the details of taking the exam. I found that the agricultural exam was offered in the fall, and as luck would have it, I could take it only three blocks from my office in Brookings. I didn't seriously consider taking any of the other discipline versions of the exam. I have always considered

myself an agricultural engineer, so that was the avenue I chose for becoming licensed.

The study process is not easy for the agricultural exam, but PEI and ASABE provide enough resources, so it's really just a matter of taking the time to prepare. One of my best preparations was finding a study partner who happened to be well versed in power and machinery, which is outside of my area. In turn, I had experience that my study partner lacked, so each of us gained knowledge in areas that were outside of our typical work duties. The exam day was a long one, but it was a great feeling of relief when it was over. My best Christmas present in 2006 was the letter that came in the mail with my PE certificate and registration number!

Becoming a licensed Professional Engineer has provided many benefits for me. As far as my official duties go, my license allows me to stamp plans that need to be sent

to state or federal regulatory agencies for approval. It also allows me to have more credibility when dealing with producers, industry representatives, and peers in my area of expertise. Even though I have not yet chosen to pursue any other professional opportunities, being a PE will be a benefit when or if that time comes. Even if I hadn't passed, going through the process of studying for the exam also was beneficial because it reinforced some of the basic concepts of agricultural engineering that I don't typically deal with. I also gained knowledge of some new reference materials that I now use frequently in the projects that I work on.

My advice to someone who is hesitant about taking the agricultural engineering PE exam is simple: just go for it. The exam is broad in scope, but it's long enough and there are enough questions that you can skip a few and still complete it successfully. And studying for it is not that bad either. I found that studying involved putting together the reference materials and knowing where to find information as much as it involved memorization or working on problems. Really, if you check out the information from ASABE and PEI, find a friend or mentor who has taken the exam or will be taking the exam, and take the time to prepare, then passing the exam should be no problem. So don't let your skills and knowledge go to waste—become a licensed agricultural engineer.



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HOMETOWN: Inwood, Iowa

VACATION CHOICES: Canada fishing trips and destination marathons