THE ART OF A BLACKSMITH

Forging a new legacy

Marlan Downey. Photo by Marea Downey.

When Marlan Downey ('87 Pecten International) first began his work as a blacksmith 30 years ago, he found it was the perfect stress reliever. "I had a 200-pound anvil, a hot piece of steel and a three-pound sledgehammer. I would talk to the steel and anvil about the week's stresses. By the end of the weekend, I was calm, nice Marlan Downey again," he says. "I sure beat the hell out of a lot of iron up there."

Downey has two forges—one at his ranch 50 miles north of Dallas and the other at his cottage in Cornwall, England, where he serves as a blacksmith for the local fishing village three months out of the year. While a forge may seem a strange addition to the home for most, Downey grew up around a forge. "My grandfather was one of the last old-fashioned blacksmiths. He homesteaded in Nebraska in the 1880s, serving as justice of the peace and a farrier blacksmith for the city of Salem." Downey spent his early years sweeping up around his grandfather's shop, watching him shoe horses and the town folk play cards around a pot-bellied stove. His father worked on the second floor of the shop as a cabinet-maker. Downey would pick up woodworking as a hobby later on in life as well.

While he may have started blacksmithing as a way to relieve stress, Downey finds it a novel way to create unique gifts for friends and family. "I design something that's one of a kind." For former Shell Executive Vice President Charlie Blackburn, Downey created a knife to commemorate two successes they shared in Cameroon and Syria. "I crafted the knife handle from Cameroon elephant ivory (before it was illegal) and used Damascus steel for the blade."

For family friend Herbert Hunt, patriarch of the Hunt family, Downey crafted a set of spurs out of one piece of steel, using 100-year-old silver pesos for the rowels. "What do you get a billionaire? This was something unique."

Downey's creations have even moved a quiet, reticent fisherman in the village of Cornwall. "One of the fishermen wanted a shark harpoon. He said he was running into 150- to 200-pound sharks and he knew they make good eating. I designed and crafted a six-foot harpoon, which he planned to hang over his boat cabin."

When a dowager in a nearby manor house lost her century-old fireplace poker, Downey found the same type of wrought iron used to create the fireplace set. Once the iron was hot, the petite dowager twisted the iron herself with Downey's assistance. "When that iron gets hot, it's like taffy."

While blacksmithing used to require a great deal of heavy lifting, power equipment has made the craft more accessible to women. "Some of the best blacksmiths in the world today are women. They have a much more artistic eye."

Trying his hand at blacksmithing was no big deal for Downey, who has always thought he can do just about anything. "I might not do things as well as others, but better than most," he jokes. In his early years, Downey built radios, a TV set from Radio Shack and put together his first computer from parts. He's also tried oil painting, woodcarving and even built bombs. "You could buy a dynamite fuse from the local hardware store. I'd make rockets and high-quality bombs for pond catfish, but I'd be careful about it."

One of his proudest creations was a log cabin that he built himself, in the Big Thicket, north of Houston, while still with Shell Pecten. "I made everything myself. I cut down the trees with a double-bitted ax—never used a chain saw. I wanted to see if I was the man my ancestors were."

After the former president of Pecten International retired in 1987, Downey barely took a breath before accepting the role of president at Arco International. Today, he serves on the board of directors for three oil and gas companies, travels around the globe to speak on energy issues and helps manage Roxanna Oil, in Houston, which he founded in 1987.

Though he expects his father and grandfather would be proud of his work as a blacksmith and a woodworker, he feels fortunate that they saw his success at Shell. "They got to read about me in the paper and saw me doing things all over the world. They were proud of me."

Downey encourages others to give blacksmithing a try. "When you heat that iron, it behaves like clay. You mold it, bend it and turn it any way you want. The secret is that it's dead easy; it's only hard to do it really well." Downey adds that if you want to learn more—or just catch up—send him an email at marlandowney@mindspring.com. "I love hearing from old friends from my Shell days." «

MENTORING ABORIGINAL STUDENTS

Alumnus passes on love of learning

Whether on the field or in the classroom, Georg Gerlach ('10 Carmon Creek - VSI) knows that kids need to be challenged. "I have high expectations, and more often than not, kids exceed those expectations."

For 30 years, Gerlach has coached kids' soccer. In 2013, he brought those coaching skills into the classroom as a science/math mentor at the Morley Community and Nakoda Elementary schools. Located on the Stoney Reserve west of Calgary, Alberta, the schools serve approximately 1,000 children of the Stoney Nakoda First Nation.

Gerlach initially became involved when the Association of Professional Engineers and Geoscientists of Alberta (APEGA) put out a call for student mentors. "APEGA seeks to promote science and math in the aboriginal communities and was looking for volunteers," he says.

When he first signed up, Gerlach thought he'd give a presentation once a month, share his life story and tell students why they should go into engineering. "I saw pretty quickly that the kids didn't need another person talking at them. Once a month wasn't enough."

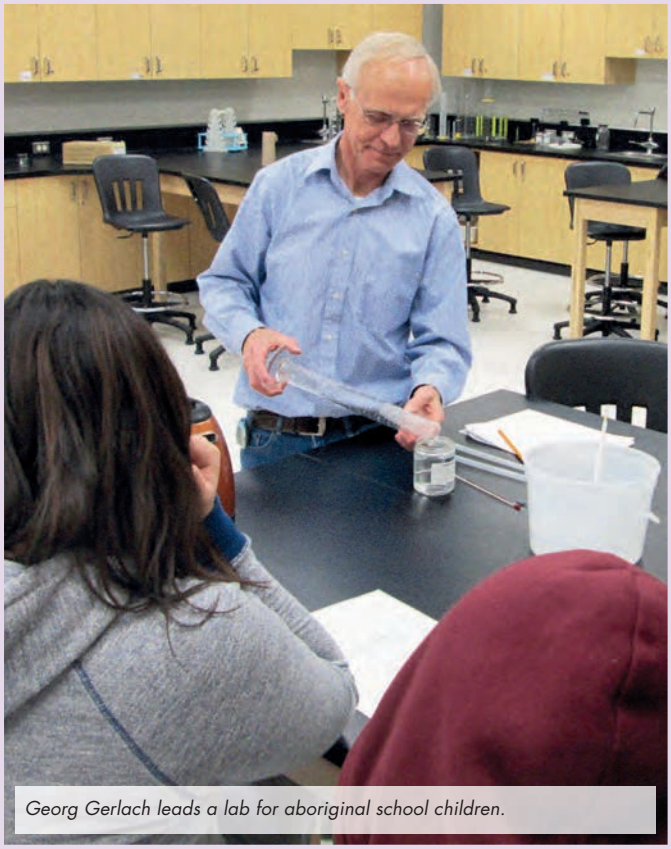
Working with the math and science teacher at Morley, Gerlach began visiting once a week, designing labs, leading class discussions, answering questions and expanding on the information in kids' textbooks. This year, he's working with grades 4, 7, 8 and 11.

"In the 4th grade class, we've grown plants from seeds. I showed them how to set up experiments and record their observations." Gerlach also put together a lab experiment on light, helping kids learn how light is reflected and refracted and how a prism works. "Most of these students haven't had that type of hands-on learning before."

Since funding can be a challenge, Gerlach works with teachers to secure supplies needed for labs. "Sometimes I bring the supplies, sometimes the teacher or school can order them. We try to design labs with home supplies whenever we can." For example, students learned about chemical reactions during a lab on making common foods. "We made ice cream in a plastic bag."

With his 8th grade students, Gerlach enjoys teaching about geology and water studies—study topics he is quite familiar with. "I can actually apply things I used to be involved in at Shell."

One of the biggest challenges Gerlach has found at Morley is poor literacy. "It's awful to see literacy problems in this day and age. A student will get to the 4th grade unable to read and write properly, but get graduated on. The academic expectations rise as they get older, and these students can't keep up."



Georg Gerlach leads a lab for aboriginal school children.

Another huge issue is absenteeism. "Many students lack good role models. They might miss the bus or need to stay home to look after younger siblings. The reasons are numerous. Some may only show up a couple of times a week." And, if you're not at school, you're not learning. "I marvel at the teachers' level of patience with this. They have to teach in a way that keeps the students who actually show up engaged, but gives the kids who missed the opportunity to catch up. Often they end up teaching to the lower level of students, which negatively impacts the better-performing students who may start disconnecting from school."

That's where Gerlach hopes he can help. "I'm there for the kids who want more. That's the motivation for me. Last year, I had a 14-year-old student who showed up two months after school started. She was shy and lacked confidence, but by the end of the year, she was one of my top math students. She worked so hard and discovered that she was able to accomplish so much more than she thought she could.

"I tell students that life can be a tough place if you're not prepared. School is an opportunity to make your life easier. Aboriginal students need role models and mentors who believe in them and help give them an understanding of what it takes to further themselves in life. These kids doubt themselves, but they are so smart and so capable. I enjoy being around them. They give me energy." «