

Poison Hill

Marfa is a small town in the high desert of West Texas, about 200 miles east of El Paso. Most of the people who live there are ranchers. Their ranches are huge because in that arid part of the country it takes a large amount of grassland to support a herd of cattle. The ranches are not measured in acres, but in sections. A section is a square mile, or 640 acres. Many ranches have hundreds of sections. Most of the ranchers and their riders live on the ranch during the week but spend the weekends with their families in town.

It generally takes several years for new people who move to Marfa to be accepted into the community. Fortunately, my dad was welcomed more quickly than normal by the ranchers because he had come to help solve a problem they were having with their herds. Cattle were dying from poisonous plants growing on many of the ranges in West Texas.

My dad was hired to find a solution to keep their cattle from being poisoned. The effort was also his research project for a Master's Degree in veterinary science at Texas A&M in College Station, Texas. The college had purchased an abandoned airfield used during WWII to train pilots near Marfa and turned it into an agricultural experimental station.

An autopsy of the dying cattle revealed they had extremely hard, yellow livers which was a symptom of poisoning. Dad's research project was to identify the plants that were causing the poisoning and, hopefully, find a way to prevent the cattle from being poisoned.

He began by identifying the plants the cattle were eating and isolated the ones that were poisonous. To help educate the ranchers on what the poisonous plants that he had found looked like, he built "Poison Hill", as he called it, in the middle of the circular drive of the experimental station. It was about 50 feet in diameter filled with dirt and rocks he had trucked in. He planted "Poison Hill" with all the different types of poisonous plants that he had identified in and around Marfa.

When ranchers came to the experiment station, he would take them on a tour of "Poison Hill" and show them the plants, so they could better protect their herds

of Herefords and Long Horns. The only solution at that time was to keep the cattle away from regions of the ranches where the suspected plants were more prevalent or send ranch hands to cut the plants down. Cutting plants over thousands of acres was not practical, but, my dad requested they harvest the poisonous plants from the densest locations and bring them to the experiment station for his research.

He took the poison plants collected by the ranchers, mixed them with hay and grass, and force fed experimental cattle he kept at the experimental station using a bolus tube. A bolus tube is an instrument used to ram large pills or medicine (bolus) down the throat of a cow. In this case, the cow was fed measured amounts of the poisonous plants to determine the proper dosage for inoculating them. The plan was to give the cattle small doses of the poison so that when they ate the poisonous plants later on the range, they wouldn't die.

In addition to feeding the cattle the poison plants and seeing how much they could eat without dying, dad also collected samples of their livers to analyze under a microscope. He used a tool developed in France called a trocar. It was a long, thin tube with a sharp point on the end that was inserted into a live cow to obtain a sample of liver. The trocar had a blade with a separate handle built into the tube so after the tube was inserted, it could be twisted to extract a sample.

Obtaining the sample required puncturing the side of the cow near the liver at the correct location, angle, and depth. This procedure didn't kill the cow but required great skill to hit the liver correctly. Dad had been a large animal veterinarian in private practice in Illinois for several years, so he was experienced in the anatomy of a cow. The cow had to be restrained in a squeeze chute to conduct the procedure and, even then, taking the sample was difficult because the cow would jump when the trocar was inserted. If not carefully done, the sample might not be collected properly, the trocar may be damaged, or an arm or a hand of the person taking the sample could be injured between the bars in the chute.

Dad's research project was successful, and he obtained a master's degree in Veterinary Medicine from Texas A&M. Degrees in this field are strangely named. I could never figure out by what title my dad should have been called. A veterinarian with a bachelor's degree is called a Doctor of Veterinary Medicine (DVM). Should his new degree have been called a master's degree in Veterinary

Medicine (MVM) or maybe a MDVM? What would his title have been if he had continued for a doctorate, maybe a DDVM? This begins to sound like the dialog from the movie, *Airplane!*

I never heard if the results from my dad's research in Marfa were ever applied to the real world of large herds of cattle in Texas. It would be interesting to know if ranchers had all their herds inoculated with a dose of poisonous plants each Spring. I suspect not.

I remember discussions of widespread spraying of plants with DDT and 2/4D when we still lived at the experimental station. In the late '40s through the '60s chemical herbicides became popular, so I suspect this method was probably adopted. Unfortunately, DDT and 2/4D were later banned for causing cancer and almost decimating the eagles in the US.

When my father moved to Marfa from Illinois he was a Midwesterner. When he returned to St. Louis a few years later, he was still a Midwesterner, but was now strongly influenced by the West. After only three years being west of the Pecos, he had adopted a western style of clothing. Partly encouraged by my mother, but mostly desiring to be more accepted by the ranchers he came to know in Texas, he began wearing a Stetson hat, one of the leading western brands, and western-cut suits for Sunday wear and business use. He didn't wear boots but became western in several other subtle ways.

After dad left Texas to take a job as a veterinary pathologist for the Ralston Purina Company in downtown St. Louis, and later as the farm veterinarian at the Ralston Purina Research Farm in Gray Summit, Missouri, he always looked western. The farmers he frequently met with individually and spoke to in groups appreciated his appearance. It was distinct from the conventional midwestern look. Dad always made fun of the "Drugstore Cowboy" look that was more like Roy Rogers, Gene Autry, or Hopalong Cassidy. His style, on the other hand, was professional and debonair.

Jeannette and I returned to the experiment station at Marfa in 2012 during a trip to St. Louis some sixty years after I had lived there when my dad was a "cow poke". I was pleased to find much of the station unchanged. Most of the old

building were still there, including the house we lived in, my dad's old office, and the barns he used for his experiments.

However, several years after dad moved away, Texas A&M sold the property to the City of Marfa which constructed a golf course on part of it. I found somewhat disconcerting seeing trees and grass where there had formerly been only cactus, sage brush, and sand. Another change was to the little adobe, two-bedroom house in which we lived. It had been turned into the proshop for the golf course. Most of the house was the same except that the living room and kitchen now held golf clubs, balls, and caps. A large sign near the entrance announced, "Marfa City Golf Course, Highest Golf Course in Texas."

I walked into the proshop and found the manager working behind the counter and a golfer paying his fees and buying some balls in preparation for a round. I inquired of the manager if he remembered when the property had been an experimental station for Texas A&M. He didn't know about that because he was too young, but the golfer nearby overheard my question and said he remembered. In fact, he knew my dad and even knew the name of my dad's major professor at Texas A&M, Dr. Deliplane.

I was amazed and delighted to have this conversation about my dad's life from over sixty years before. And I couldn't help but ask if either of them knew what the little mound of dirt and rocks was in the circular area we could see out the window of the proshop. Neither of them knew what it was, but said they thought it may have been a burial site of some kind. I told them it was called, "Poison Hill" and had been constructed by my dad to display poison plants to ranchers near Marfa back in 1950. Now it was their turn to be amazed.

"Poison Hill" will likely continue to fade into obscurity. I doubt if the city fathers will bother to mount a plaque to honor a display of poison plants, but the little mound of dirt and rocks near Marfa, Texas still carries memories for the Vardiman family.