

Scars of Strength

One mistake changes an Iowa farmgirl's life forever.

Story by
CRYSTAL ALBERS

The day Kristi Ruth almost died started like most other days during the bitter cold of February 2007.

The 15-year-old woke up around 6 o'clock Sunday morning to the sounds of her father, Joe, calling across the family's small one-story Chariton, Iowa, farmhouse. She stretched and looked at the plaster ceiling while her breath steamed upward in the cold air.

The night before, the family had gone to a community social event and dance and had returned home late; she was tired, and her bed was warm. "Kristi, get up," she heard her father say for the third time.

With a sigh, she resigned her attempts for a few extra minutes of sleep and reluctantly peeled herself from the soft comforts of her loft bed. As she pulled on a pair of worn jeans, a long-sleeved T-shirt and a friend's sweatshirt she had meant to return the week earlier, her exhaustion began to give way to tingling excitement.

Her father had brought 10 bred Red Angus heifers home three weeks prior, and the family had a full day of work ahead of them. But she didn't mind. She enjoyed nothing more than

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PHOTO BY CRYSTAL ALBERS

Above: Kristi Ruth stands in the barn where she almost lost her life. The Chariton, Iowa, teen became entangled in a PTO shaft in February 2007, breaking her left arm in six places and severing a major artery. The traumatic experience was difficult for the family, especially her father.

Left: The Ruths are proud of their working farm family, mother Tammie says. From left, Kristi, father Joe, and brothers Josh and Jake take a break from clearing brush on the family's 175-acre Iowa farm the winter preceding the accident.



PHOTOS COURTESY OF THE JOE AND TAMMIE RUTH FAMILY

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working hard and being outside with the cattle and horses. Besides, those heifers were an investment in her future and her dream of becoming a large-animal veterinarian.

She brushed her long, blonde hair into a ponytail and made her way to the kitchen where she began helping her mother, Tammie, make breakfast. The coffee pot gurgled in the corner as they discussed the day's tasks and stacked French toast onto a platter.

The family gathered in the home's central room that served as the living and dining area. She took a seat next to younger brother Josh at the large round wooden table that had been in her father's family for years and listened to older brother Jake joke about the night before with a friend who had stayed over.

With only 13 months separating the two teenagers, Jake and Kristi were in the same sophomore class at school. The brother-sister duo always did everything together and had become tightly knit, like most of the family members whose pictures lined two entire walls of the small room.

Tammie had carefully hung each family photo when the Ruths purchased the then-rundown farmhouse and 175 acres from an aging tenant in 2001. Among the faded black-and-white portraits of remembered loved ones hung photos of Joe and Tammie's wedding, snapshots of friends, and photos taken at family events.

Kristi's favorite hung directly across from where she was seated. Her family's smiling, sun-kissed faces beamed at the camera after

her aunt's summer wedding, and Kristi was proudly wearing a dress Tammie had worn years before.

But across the room from those happy faces hung another photo that served as a darker reminder of life's harder lessons. Near the door to the porch hung a photo of Joe's brother, Dick, who had died just more than a year earlier from a tractor rollover accident. The youngest of nine children, Joe had deeply cared for his older brother, and the loss was a hard one for the Ruths. Dick's worn, yellow-and-black Chevy cap hung next to the photo and served as a reminder of what they had lost. All three of the Ruth's children had taken the lesson to heart, and Kristi especially had become an advocate for farm and tractor safety. A week prior she had centered her FFA speech on the topic.

Back at the table her father was finishing breakfast.

"I figure that if I have two jobs this summer and work really hard, I can have those heifers paid off by my birthday," Kristi proudly told him. She had penciled it out and determined her Sept. 10 Sweet Sixteen would serve as a deadline for paying off the bred heifers she would use as revenue for college. It would be a birthday present to herself, she decided.

The family cleared the table and began to make their way outside.

Kristi pulled on her chore coat, leather gloves and insulated boots caked with the remnants of chores the day before. The air outside was crisp but fresh. The sun reflected brightly off the snow-covered hillside, and it had become unusually warm, almost springlike — a great day to repair fenceline and set the headgate in the barn.

The Ruths had spent the last several years carefully carving out that barn and the surrounding outbuildings from the overgrown and weed-infested hillside. Kristi and her brothers knew

almost every inch of the land by now, having helped completely renovate the farmstead, clearing trees, installing water lines, building a pond and additional driveways, stretching fence and setting hedgeposts across much of the pasture ground.

Indeed, no Ruth was a stranger to hard work. They relied heavily on one another, and each knew how to repair fence, operate the farm's machinery and do chores for the 75-head Angus- and Red Angus-based cow-calf operation.

Kristi was openly proud that she could easily keep up with her parents and brothers. She had become physically fit taking care of the animals and could now carry four 5-gallon buckets of corn at a time, she'd jokingly boast to Jake and Josh.

Self-reliance, doing things herself — these were central to her persona. It was that strength and grit that Kristi knew would carry her through high school and into college where she would become a large-animal veterinarian and some day care for the animals she loved so deeply.

For Kristi, though, fate had a different plan, and on Feb. 18, 2007, her life changed forever.

Quarter-inch of fate

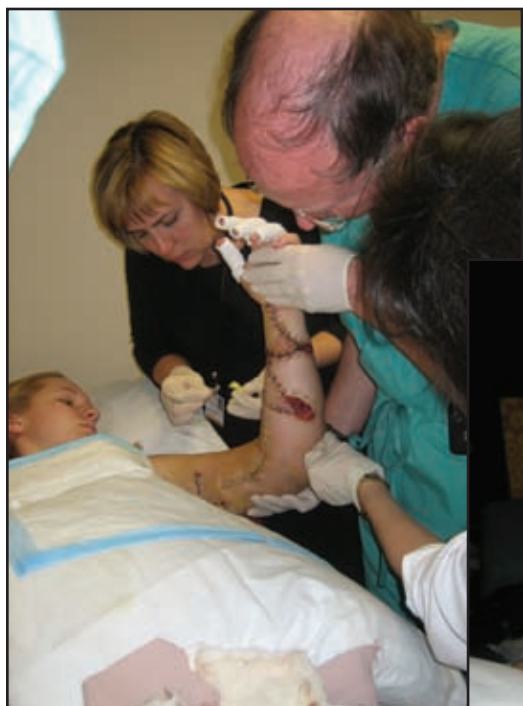
After a full morning outside, Tammie had left to take Jake's friend home, while Joe, Jake, Kristi and Josh tackled the job of putting a headgate in the barn that would serve as a dry, warm working facility for Kristi's heifers. At approximately noon, the four were ready to begin digging postholes to set the base.

Joe hopped on the tractor, hooked onto the posthole digger and backed it into the barn. As he began digging, though, they could tell this wouldn't be an easy job. The February ground was frozen, and after about 45 minutes of fighting the packed earth, the head of the auger began to shake, hitting the barn wall in a crude Morse code staccato.

Kristi carefully reached out to stabilize it. After a few more futile attempts, Joe announced they were going to try it another day.

Jake jumped down from his perch near the auger and Joe reached for the PTO shut off as Josh looked on. But as Kristi began to remove her hold on the three-point support bar by the auger head, the back of the glove on her cupped left hand caught on a shear bolt that was a quarter inch too long.

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Doctors work to clean and repair Kristi's torn arm. The 15-year-old had more than 250 staples and stitches following the accident.



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Although the PTO had already begun to wind down, it was too late.

In a frantic instant, Kristi's left arm wrapped around the machinery up to her shoulder, breaking her bones with every rapid turn. She was trapped, and what started as a beautiful winter day suddenly became a horrific moment frozen by the piercing screams of her father and brothers and sounds of snapping bones and ripping flesh, like fabric being torn into rags. A race to free Kristi from the implement began. Her life hung by the threads of her torn coat.

With the PTO stopped, Joe frantically jumped from the tractor and fished for his cell phone, handing it to Jake, who quickly dialed 9-1-1. With her good hand, Kristi reached for her own cell phone and gave it to Josh so he could also call for help while her father and Jake worked feverishly to untangle her.

They unhooked the digger from the hitch point, and Jake dug in his pocket for his pocketknife. In what seemed like hours, Jake used his dull knife to painstakingly saw away at the shreds of Kristi's coat, being careful not to cut her. They hurriedly unwrapped her from the auger — her arm spun around the cold metal like a wet rag — and as she stood, her limp arm drooped to her knees.

She cradled her battered arm, now doubled over, in the crook of her other and began to make her way toward the house. Her father helped her up the hill, but as she reached the top, she became weak and had to sit down on the blade of the 1206, parked between the house and the barn.

As she rested with her arms folded across her middle, the realization of her injuries began to sink in. She couldn't feel her left arm at all. It was completely numb.

"This is bad," her dad said. His voice had a pitch to it that she had only heard once — when her uncle died.

Her thoughts quickly raced to her uncle and the FFA presentation she gave on farm



Today, Kristi's scars remind her — and others — to be careful on the farm. She says she still gets many "pity" looks.



Kristi's arm was broken in six different places; the break near her elbow was the hardest to repair.



After a six-hour and another eight-hour surgery, Kristi's bones were pinned and plated. Yet, her recovery had only begun.



safety the week prior that had earned a spot in district competition.

"Mrs. Greubel is going to kill me," she thought. Her ag teacher would be so disappointed.

Resting against the blade, she glanced along the road to see Jake waving his arms and legs in a wild jumping jack, frantically trying to stop an oncoming vehicle. The car topped the hill, and Kristi could see it was Tammie returning home.

As she neared, Tammie's heart sank. She whipped into the driveway nearest Kristi, where Joe helped Kristi into the car. Leaving Joe and the boys in stunned silence, Tammie sped to the neighbor's house.

John Pierce, a paramedic specialist first responder and the volunteer fire department chief, lived up the road. He was waiting for them along the roadside and followed Tammie to the Columbia, Iowa, fire department just two miles away. John's son

Jason, nicknamed "Pumpkin" and also a first responder, met them there and helped Kristi into the ambulance.

As John worked to stabilize her, the realization of Kristi's injuries hit Tammie with force. From her passenger seat, she could hear John's calm, but deathly serious, voice from the back.

"Kristi, I gotta cut it. I gotta cut it," he said, responding to her pleas to salvage her friend's borrowed sweatshirt. John began cutting through Kristi's clothes to assess the damage and prep the wound. Free of her twisted clothes, Kristi's limp arm fell to the floor of the ambulance. John's face turned white, and Tammie froze. Her injuries were worse than they thought.

It was then that Kristi became frightened.

"Mom, come hold my hand," she said, her voice shaking. Tammie squeezed into the back and looked at her daughter's bare arm. It had been broken in six places. There was hardly any blood and only four cuts, but they were severe and her white tendons showed through in places.

The twisted shreds of her chore coat had served as a tourniquet to her swelling arm. Now John worked to put an inflatable tourniquet on the arm. He couldn't bring himself to tell them he suspected she had severed a major artery and was in serious danger.

Another member of the Columbia Fire

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Department had shut down part of Highway 14 near John's house, and cars were backed up for miles. But as they neared the landing site, John announced they wouldn't have time to wait for a helicopter there. They'd have to meet it at Knoxville, 12 miles north.

Finally, Kristi, Tammie and the first responders arrived at the Knoxville hospital, where a helicopter was waiting to take them to Des Moines. By now, Kristi realized she'd likely lose her arm. Trying to be brave, she began to think of how she could manage with just one arm. It would be hard, but she could handle it, she determined.

During the short, 15-minute flight, her arm fell to the floor once more. After a couple attempts to stabilize it, the emergency medical crew finally taped her arm to the gurney. At Mercy Medical Center in Des Moines, Kristi was rushed to the emergency room where Joe met them. He consulted with doctors while Tammie called anxious relatives.

Doctors there said without extensive surgery — the kind unavailable at the hospital — they'd need to amputate just below the shoulder. One of the doctors suggested flying her to the University of Iowa (UI) Hospital in Iowa City where advanced surgery and facilities might save her arm.

Joe decided they'd head to Iowa City. On the 45-minute flight there, Kristi became strangely calm and even cracked a few lighthearted jokes to the medical flight crew. She recognized her best friend Maggie's house as they flew over Williamsburg, and, as an avid UI fan, even let out a whistle when they began their descent near the university's Kinnick stadium. Her optimism in the face of such grave danger helped to lighten the seriousness of what she was about to endure.

It was almost 7 p.m., and Kristi was about to undergo another seven hours of X-rays, consultations and surgery. Although conscious during X-rays, she would spend the following 11 days in and out of consciousness — a blur of additional operations, night terrors, pain, medication, muscle spasms and an endless string of visitors. She'd remember very little.

Harsh reality

Today, a year and a half later, Kristi sits in the same room where her family ate breakfast the morning of her accident. With her right hand she subconsciously traces the puffed scars that criss-cross up and down her left arm.

She flips through the scrapbook Tammie made to keep herself busy during their extended time in the hospital. It serves as an all-too-vivid reminder of the accident, but it helps Kristi remember what she has gone through and how far she has come, Tammie explains.



Kristi uses a presentation board to display the clothes she wore the day of the accident. "It usually gets people's attention," she says, referring to the many presentations she has given on farm and tractor safety.

PHOTO BY CRYSTAL ALBERS

"My skin was in pieces," Kristi says matter-of-factly, looking at the photocopied X-rays of her wounds. "Because [my artery] was severed, they thought I should have bled to death. They didn't know how, but somehow I was still getting blood to my fingers so they could save my arm."

At the UI hospital, they first repaired her artery, taking a vein from her leg to replace it. Five different teams worked to save her, many of whom repaired her damaged muscles, tendons and nerves, Tammie notes. One six-hour and another eight-hour surgery helped to fix her now pinned and plated bones.

"To tell you the truth, I have no idea how many screws I have. I've never counted them," Kristi says.

Although she doesn't remember much of her initial hospital stay, she can't forget the excruciating pain. She points to one groggy-eyed photo.

"I was on a lot of painkillers in this one," she says with a laugh.

After an allergic reaction to initial pain medication that she says, "hurt worse than a sunburn-poison ivy combination," they finally got her regulated — although night terrors induced by the nerve medication continued.

"There'd be nights where they had a fan on, and the fan sounded like the auger. It gave me night terrors, and I woke up screaming and crying," she admits. "It wasn't something I'd wish on anyone. It was that miserable."

Kristi quickly turns the page and smiles at the next several photos showing her many family members, friends, neighbors and classmates who had braved a late winter snowstorm to visit the hospital. Her room, located on the hospital's pediatrics floor, was

lined with balloons, flowers and cards, and well-wishes from those who couldn't make it in the ice and drifting snow. But even with so much encouragement and reminders of home, the hospital setting began to wear on her.

"They switched me to outpatient instead of inpatient because I was going crazy in there," she explained. "I just wanted to escape."

Life outside hospital walls, however, was no picnic. Kristi and Tammie moved in with Tammie's parents in nearby Coralville for a month to keep up with Kristi's grueling physical therapy schedule and regular doctor's appointments.

Once they finally returned home, Kristi had to continue her therapy herself, Tammie says, and every Wednesday they made the 2½-hour drive back to Iowa City for weekly appointments. She motions to a 3-inch stack of papers sitting on the side table.

"These are her medical records — 68 visits worth," she says. "And that's not all of them. That's just a couple of doctors."

With her recovery came a follow-up tendon transfer surgery to regain mobility in her fingers, and another to fix pain in her wrist from tissue that caught on the screws.

"It still hurts every day," Kristi admits. Nights are the worst. "I don't get up now until about 8 or 9 in the morning because I can't sleep at night. I want to go to sleep, but my mind races. I usually get to sleep about 1 o'clock in the morning, but then I wake up frequently during the night because of pain."

She still takes medication for nerve pain, muscle pain and bone pain, and another pill to help her go to sleep. She still can't feel her middle finger and thumb, and doctors don't know if she'll ever regain complete hand function.

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"I'm never going to get my index finger back, so they just tied it into my middle finger, and even if I push my wrist, it can't go all the way forward," she demonstrates.

New way of life

Since returning home, Kristi has had to make other adjustments, as well.

"I have trouble with all the good stuff," she says with a smile.

Driving is difficult, and she can't hold a phone or brush her hair with her left hand since her elbow doesn't bend far enough. She has trouble opening knob-style door handles and car doors, and she's had to improvise with everyday tasks. She uses her mouth for a lot of things like unscrewing bottle caps. She uses a one-handed electric can opener, and she has to cut meat with scissors. Kristi's also had to put in overtime at school to compensate for all of her missed coursework and to catch up with her classmates, she says.

In what has probably been the hardest adjustment, doctors told her she couldn't be outside with the cattle for fear she'd slip, fall and cause irreversible damage to her fragile arm.

That hasn't stopped her from trying, though, Tammie notes, and while home alone one summer day following her surgery, Kristi even got a heifer into the barn herself and pulled a calf using her legs and right arm. A neighbor had come to offer help, but she insisted she try it herself.

"It was hard, but I did it myself," she beams. Her physical strength has weakened considerably though, she says, and for the most part, she's resigned to staying in the house while the rest of the family does evening chores. She regularly makes supper and does other household tasks like folding laundry.

It's been a hard transition for the rest of the family, too. Everyone is much more careful around the farm, Tammie says.

"We've stepped back and slowed things down. We're much more aware," she says. "Before, we'd just go out and do it. Now we sit down and talk about things before."

Joe won't talk about the accident, and Jake doesn't like to either.

"My dad, he can't take it at all," Kristi says, tearing up. "He can't look at my scars. For a long time after [the accident], anytime he'd see me his arm would start twitching. I don't know why, just a nervous tic I guess. I've never seen my dad like that before."

Tammie explains, "Joe blames himself. He thinks it's his fault. And he feels like people look at him and think 'How could you have a girl out there around a PTO shaft?'"

That girl-vs.-boy mentality frustrates Kristi.

"When someone says, 'Why were you doing that, you're a girl,' it makes me mad. I can work just as hard if not harder than many boys. I've never let being a girl get in my way," she says with fervor.



Members of the Columbia, Iowa, fire department were the first to respond to the Ruth's emergency calls. Their neighbor, John Pierce (first row, left), is the fire department chief who helped stabilize Kristi. His son Jason, also known as Pumpkin (standing, fourth from left), helped get Kristi into the ambulance.

Still, Joe rarely goes back into the barn, and the headgate was never put in. He wants to burn it down and start anew in a better location, Tammie says.

And although hard to admit, her daughter even gets discouraged sometimes, she adds.

"She's changed a lot, but who wouldn't," Tammie says. "She's an amazing kid though. If it wasn't for her good attitude, I don't think she would have survived."

Some can't believe she did.

"I get a lot of pity looks. Like 'Oh, I'm so sorry.' Basically people think I can't do things anymore," she says, adding that people in the community and school seem to pity her the most. "When I do things like try to open a pop bottle with my mouth, they'll say, 'Oh, honey, let me get that for you.' And I'll say, 'No, that's all right. I can do it.'"

It's that can-do attitude that allows Kristi to return to a life with purpose.

"I still have an arm, and even though it doesn't work all the way, I force myself to try to use it and try to do things myself."

A different calling

Since the accident, Kristi has given up her dreams of becoming a large-animal veterinarian due to her physical limitations. Instead, she's focused her goals elsewhere.

Now she's heavily involved in FFA, 4-H, the National Honor Society (NHS) and class steering committees, and she serves as a manager for Josh's football team.

With hopes of becoming an educator, Kristi has also joined the national nonprofit organization Farm Safety 4 Just Kids (FS4JK) based out of Urbandale, Iowa, as one of two new youth representatives.

Through the organization, FFA and 4-H, she maintains a full calendar of scheduled speaking events, addressing hundreds of youth at farm safety camps, county fairs, school events and state functions. She shares her personal experiences with farm accidents and brings the clothes she wore the day of the accident as a visual.

She's done a radio broadcast spelling out tractor safety issues, and revisited UI to speak at a conference on rural health issues.

Through FS4JK, she traveled to Washington, D.C., to participate in the

National Organizations for Youth Safety meeting where she broadcast the farm safety message on a national level.

"The word about tractor safety needs to be spread throughout the whole country, and if square one is a small county in southern Iowa, I guess that's where we need to start," she says during one of her presentations.

Indeed, her newfound calling has given her renewed focus. What was once physical strength has been replaced by power of a different kind — the power to change the lives of those who can learn from her experiences.

Glancing back through the scrapbook, her eyes linger slightly longer on the photos of herself before the accident — pictures with friends, jumping in the pond, feeding hay. Oh, she's still the same girl, but with a few more scars that help tell her story.

"My scars don't bother me. I've come to accept that they aren't going to go away," she says. "They're there, and it's a part of me. It's a part of who I am now."



Editor's Note: This story was named the American Agricultural Editors' Association (AAEA) 2009 Story of the Year after first appearing in the October 2008 Angus Journal. Since the story's original publication, Kristi has continued her farm safety outreach efforts, speaking to hundreds of youth throughout Iowa. The Ruths worked extensively with Iowa State University to complete a farm safety DVD (available at www.extension.iastate.edu/news/2009/jun/121801.htm), and Kristi met with the Deputy Secretary of Transportation in Washington, D.C., to discuss rural teen traffic safety. She also completed an interview with the local TV news station and revisited the UI hospital to tell her story to patients and medical students.

She was nominated for the Red Cross Heroes of the Heartland award and won the 2009 Youth Good Samaritan award.

Kristi continues to experience pain throughout her arm and periodically undergoes pain management, where she receives 25-35 injections from the base of her neck to her elbow. Tammi reports that with less use Kristi's arm muscles are losing their strength. That has not stopped the now 18-year-old, however. Kristi recently graduated from high school and is now a student at Kirkwood Community College in Cedar Rapids, Iowa.