

Cowgirl Morning

by Bryn Fleming

Caring for the cows on a ranch is a hard job for Pa and his two daughters. In this excerpt, Pa awakens his daughters, Fran and Cassie, to help round up his neighbor's buffaloes. In the end, one daughter must also confront Cyrus, a fierce and dangerous bull.

BANG! BANG! BANG! I jerked awake to Pa pounding on our door.

"Daly's buffaloes broke the fence. We have to get them out of the alfalfa!" he shouted.

Fran was on her feet in an instant. Pulling her jeans on under her nightgown, she stepped into the hall. "Can't we do it, just us, Pa? Cassie will only be in the way."

5 "Both of you," Pa said as he hurried for the back door. "We need all hands."

Me, I've never liked being yanked out of a hard sleep and a good dream. I heard buffaloes through my sleep-haze and scrunched lower under the covers, remembering Cyrus's chuffing breath on my neck and the creaking whine of fence planks. I grumped and groaned when Fran pulled the quilt off me and slapped my feet.

10 "Let's go, Cassie. Pa needs us quick." Fran jerked on her boots and slapped my feet again as she raced out of the room.

I pulled yesterday's jeans from the pile of clothes by my bed, shrugged into a T-shirt, and grabbed my hat off the bedpost. Pa had a pan of cold biscuits and a dish of butter on the table. I gobbled one as I ran for the barn.

15 Fran was drawing up Pet's cinch¹ in the stable yard. Stars were fading in the east as the sky lightened over the Blue Mountains. The autumn air smelled of sage and juniper scrub. My lungs sucked it in like cold water.

20 Rowdy, my paint pony, stamped in his stall and nickered² after Pet. The early morning darkness and close scent of musky buffaloes set him on edge, but I talked him into standing quiet and slipped the bit in his mouth. He pranced and high-stepped as I led him out of his stall to saddle him.

Up ahead Pa was edging his mare around the wide gate to the open pasture. Fran and Pet followed. I leaned out and hooked the gate closed behind us, something Rowdy and I

¹cinch: a band or strap used to tighten the saddle on a horse

²nickered: the soft neighing sound a horse makes

25 had been working on. I patted his neck. "Atta boy, let's go get those buffs." There was a shakiness in my voice, but I squeezed Rowdy into a lope³ to catch up.

"Looks like half the herd is in here," Pa shouted. "Big piece of the north fence is down." We stood a minute on the rise between the hayfield and the house. Thirty or forty buffaloes spread out in the tall grass.

30 "There's Cyrus. Watch him." Pa pointed to a huge, dark shape shifting like a hill in an earthquake. "I'll pick him up and head him back through," Pa said. "Some of the cows should follow. Fran, take the right." He ran his gaze over the herd again. "Cassie, hang back. Move any stragglers up toward Fran. And stay away from Cyrus." He didn't need to tell me twice.

35 Fran loped off, whooping and chasing the cow buffs toward the hole in the far fence. Rowdy and I crisscrossed the field after strays. "Hut! Hut! Hut!" I called as I swung the end of my rope at a cow's flank. Fran shot me a look. "Get after those buffs, Cassie. You're not inviting them to a party!" I hollered louder and swung my rope harder. On the other side of the field, Pa had Cyrus headed back toward the broken fence.

40 Seems like I looked away toward a hawk screech for only a second when I heard Pa's mare whinny sharply. I snapped my head around quick. She was rearing up in high alarm and stepping backward. Pa wasn't in the saddle.

45 Cyrus pawed the dirt in front of the mare, swinging his big woolly head from side to side, his horns low to the ground. The mare spun off and stood stiff-legged. Pa sat in the dirt with one leg stretched out in front of him. Cyrus flared his nostrils, sucking in Pa's scent.

In my mind I heard a plank fence splinter and smelled Cyrus's angry stink. I shivered, but there really was no choice. I kicked Rowdy and laid the reins across his neck.
50 Rowdy jumped to it as Cyrus scraped the dirt powerfully with his sharp hooves and charged.

55 For such cumbersome-looking beasts, buffs can move real fast. I leaned forward in the saddle, racing Rowdy across the field toward Pa, hoping we'd be in time to head off the enraged bull. As Cyrus closed in, I shouted and waved my hat frantically. Cyrus jerked his head toward us and turned as Pa
60 rolled out of his way.



³lope: relaxed stride of a horse

Rowdy stopped on a dime, like he faced a mad buffalo bull every day. We dodged in close, and I leaned out and slapped Cyrus's rump with my hat while Rowdy danced out of reach of his horns. Cyrus left Pa in a whirl of dust and pounded after us.

65 My hat flew off as Rowdy sprinted
over the field. We cut a sharp right at
the broken fence, and Cyrus plunged
through the gap. A dozen cows
streamed after him with Fran at their
70 rear. She let out a whoop and flashed
me a grin. We'd done it!

As I rode back, Pa was trying to
get his feet under him. His jaw was
clenched tight, and his eyes were
narrowed. "Good work, Cass," he said.
75 His voice shook, and he held his leg
with both hands. I swung down next
to him.



He stood crooked on one leg, leaning hard on my shoulder. I stood about a foot shorter than Pa, but I felt strong and tall with him leaning on me like that.

What does the simile in line 17 help the reader understand about the setting of the passage?

- A It is hard to breathe in the stable yard.
- B The morning air is crisp.
- C It indicates the time of day.
- D The season is changing.

The author **mainly** increases tension in the passage by

- A revealing Cassie's inexperience and emphasizing Cyrus's power
- B emphasizing the number of escaped animals and Cyrus's ability to lead the pack
- C emphasizing Pa's fall from the horse and Cassie's difficulty handling her own horse
- D revealing Fran's belief that Cassie is unskilled and emphasizing the early hour of the day

Fran's behavior toward Cassie adds suspense to the passage by

- A** causing the reader to question Cassie's ability to help complete the job
- B** influencing Pa to keep Cassie out of the way
- C** encouraging Cassie to behave recklessly in order to impress Pa
- D** persuading the reader that her family treats Cassie unfairly

Read the sentence from lines 23 and 24.

I leaned out and hooked the gate closed behind us, something Rowdy and I had been working on.

What does this sentence reveal about Cassie?

- A** She gets distracted during stressful situations.
- B** She is frightened and is stalling for time.
- C** She takes time to improve her skills around the ranch.
- D** She thinks closing the gate will impress her sister.

In lines 39 and 40, what mood is created by the use of words and phrases such as "screech," "snapped," "rearing up," and "high alarm"?

- A** anger
- B** disappointment
- C** panic
- D** concern

Which excerpt confirms the theme of Cassie as a reluctant hero?

- A** "I jerked awake to Pa pounding on our door." (line 1)
- B** "In my mind I heard a plank fence splinter and smelled Cyrus's angry stink. I shivered, but there really was no choice." (lines 46 through 48)
- C** "I pulled yesterday's jeans from the pile of clothes by my bed, shrugged into a T-shirt, and grabbed my hat off the bedpost." (lines 12 and 13)
- D** "I leaned out and hooked the gate closed behind us, something Rowdy and I had been working on." (lines 23 and 24)

Which incident **most** helps develop the theme that even a frightened person can be brave when necessary?

- A** Cassie sees Cyrus pawing the dirt in front of the mare.
- B** Cassie slaps Cyrus on the rump to get his attention.
- C** Cassie helps Pa by letting him lean on her.
- D** Cassie's hat flies off when Rowdy sprints over the field.

A Bigfoot by Any Other Name . . .

by Kelly Milner Halls, Rick Spears, and Roxyanne Young

Bigfoot. Sasquatch. Yeti. Yeren. Yowie. The names and the details may differ from place to place, but from North America to China to New Zealand, one thing is certain: Something is out there. Chocolate brown or white as snow, these hair-covered, upright-standing creatures have been talked about for more than six hundred years. And whether
5 we read about the ancient legends or the modern-day sightings, the stories make us wonder.

Bigfoot = Sasquatch

Bigfoot is a creature of many names. According to naturalist Dr. Robert Michael Pyle, Native American legends call it by several exotic names, including Sasquatch, Sokqueatl,
10 or Sesquac (from a language spoken by several tribes of Pacific Northwestern Native Americans). No matter how it's pronounced, the name means "wild man."

That certainly describes the creature Roger Patterson and Bob Gimlin claimed they saw wandering along the rural Northern California timberline in October 1967. The creature was enormous—at least seven feet tall—and walked upright like a man. But it wasn't a man. In fact, it was like nothing the outdoorsmen had seen before.

15 Patterson carefully reached into his saddlebag and pulled out his 16-millimeter movie camera to capture the moment on film. And for decades, Bigfoot believers have been thankful he did.

Was Sasquatch the last thing Patterson expected to see along Bluff Creek as he let his horse rest and sip cool water? Not necessarily. He and Gimlin were known
20 Bigfoot/Sasquatch hunters and longed to prove the legends were true. The film they shot became one of the most famous pieces of footage in Bigfoot history.

Even the experts can't agree on the film's authenticity. Some say it's an elaborate hoax, a fake Bigfoot, a prank. But others see the film as proof-positive that the elusive primate is more than a North American myth.

Keeping Track

Dr. Jeffrey Meldrum, Idaho State University Professor of Anatomy, Primatology, and Paleontology

25 Raised in the heart of Bigfoot country—the Pacific Northwest—Dr. Jeffrey Meldrum grew up in the shadow of the legend. So it's not surprising that he'd have an interest in the

hair-covered beast. What makes him different from most Bigfoot-enthusiasts is the careful and scientific approach he's taken to analyze dozens of Sasquatch tracks.

30 About Dr. Meldrum's research, professor and Cambridge University Press author/editor Walter Hartwig says, "[Meldrum] has executed the model approach. He's weeded out what he believes might be hoaxes or misidentifications. . . . It's beautiful and well-controlled, inductive science. You may think it's far-out, but methodologically speaking, he has toed the line very strictly."

35 His conclusion? There is sound, scientific reason to believe North America has its own giant ape. But, as he admits in the *Denver Post*, convincing the world and his professional peers hasn't been easy. Meldrum says, "If someone takes the time to visit the lab, they are almost uniformly overwhelmed by the amount of data. Usually they have no concept of the amount of evidence that's been collected."

Body of Evidence: The Skookum Cast

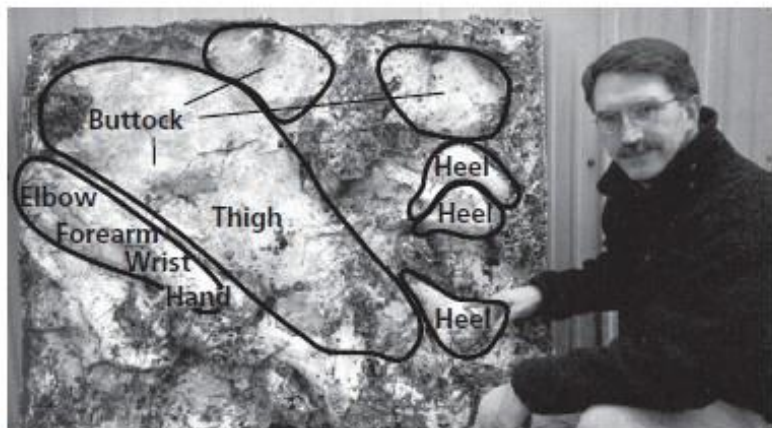
40 Using apples and melons as bait, members of the Bigfoot Field Researchers Organization claim to have captured the first partial body cast of a Washington State Sasquatch. Positioned at the center of a mud puddle in the Skookum Meadows of Gifford Pinchot National Forest, not far from Mount Saint Helens, the tasty snack allegedly convinced a full-grown creature to lie at the puddle's edge and feast. Deep impressions of a hair-covered hip, elbow, heel, wrist, and even buttocks were left in the mud. Mere hours
45 after the mystery creature left the scene, the team captured the impressions in a plaster cast.

Idaho professor Dr. Jeffrey Meldrum, the late Dr. Grover Krantz (a physical anthropologist from the Washington State University), and journalist John Green carefully studied the plaster cast to try to determine what kind of animal actually visited the scene.
50 In a press release circulated by the Idaho State University, the men stated that the impressions could not have been made by any "known" animals living in the region and that an unknown primate was the most likely candidate.

Others have said an elk kneeling to gobble the fruit made the impressions in the mud, not a mysterious cryptid. Dr. Meldrum disagrees.

55 "While not definitively proving the existence of a species of North American ape," Dr. Meldrum said in the release, "the cast constitutes significant and compelling new evidence that will hopefully stimulate further serious research and investigation."

60 More than 200 pounds of
plaster was used to make
the Skookum Cast, which
is 3½ feet wide and 5 feet
tall. Measurements of the
imprints indicated that
whatever creature made
65 this impression was 40 to
50 percent larger than a
6-foot-tall human being.
When the cast was
cleaned, hair samples were
70 extracted. All of them turned out to belong to deer, elk, coyote, and bear—all but one. One
hair had unique primate (ape) characteristics. Dr. Henner Fahrenback, a biomedical research
scientist from Beaverton, Oregon, has labeled it “Sasquatch.”



Read this sentence from lines 39 through 41 of the article.

Using apples and melons as bait, members of the Bigfoot Field Researchers Organization claim to have captured the first partial body cast of a Washington State Sasquatch.

The authors' use of the phrase "claim to have captured" reveals a central idea of the article by suggesting that

- A** the creature's need for food has lured it to many places
- B** proof of the creature's existence continues to be questioned
- C** the creature has avoided traps that should have restrained it
- D** physical evidence will eventually prove that the creature is real

Read this sentence from lines 55 through 57.

“While not definitively proving the existence of a species of North American ape,” Dr. Meldrum said in the release, “the cast constitutes significant and compelling new evidence that will hopefully stimulate further serious research and investigation.”

Which of these is closest to the meaning of “stimulate” as used in this sentence?

- A** increase the quality of
- B** prevent mistakes in
- C** promote interest in
- D** provide funding for

Which detail from the article best supports the claim that Bigfoot exists?

- A** “The creature was enormous—at least seven feet tall—and walked upright like a man.” (lines 12 and 13)
- B** “Deep impressions of a hair-covered hip, elbow, heel, wrist, and even buttocks were left in the mud.” (lines 43 and 44)
- C** “*One hair had unique primate (ape) characteristics.*” (lines 70 and 71)
- D** “*Dr. Henner Fahrenback, a biomedical research scientist from Beaverton, Oregon, has labeled it ‘Sasquatch.’*” (lines 71 and 72)

The authors develop the central idea in the article by

- A** analyzing investigative data to show that evidence of Bigfoot’s existence is uncertain
- B** debating conflicting views of Bigfoot to show that both sides are partly correct
- C** providing historical sightings of the creature to show that most experts believe in Bigfoot’s existence
- D** summarizing scientific opinions to show that Bigfoot is a mythical creature

What does the phrase “elaborate hoax” mean as it is used in line 22?

- A** a well-planned trick
- B** a well-known tale
- C** an unusual story
- D** an odd event

Which quotation expresses the central idea of the section, “Keeping Track”?

- A** “Raised in the heart of Bigfoot country—the Pacific Northwest—Dr. Jeffrey Meldrum grew up in the shadow of the legend.” (lines 25 and 26)
- B** “He’s weeded out what he believes might be hoaxes or misidentifications. . . . It’s beautiful and well-controlled, inductive science.” (lines 30 through 32)
- C** “But, as he admits in the *Denver Post*, convincing the world and his professional peers hasn’t been easy.” (lines 35 and 36)
- D** “Meldrum says, ‘If someone takes the time to visit the lab, they are almost uniformly overwhelmed by the amount of data.’ ” (lines 36 and 37)

Cleaning Up

by Mark David Whitehead

I stood in the restaurant kitchen, my eyes wide, arms hanging awkwardly, ready to work but unsure of what to do. I had the feeling that a bright neon sign on my forehead was flashing the message “New Employee.” The scent of warm rising dough, fresh tomato sauce, and melted cheese clashed with the odor of dish soap and disinfectant as Aaron, my
5 manager, guided me to the dishwashers’ domain.

“Jim will train you,” Aaron said simply and walked away.

A first-year college student smiled, tossed me a dish brush, and said, “Let’s get started.”

Jim showed me the basics of washing pizza dishes—not that washing dishes is extremely technical, until you come to that annoying melted cheese stuck on the plates.

10 “If you want to get past just washing dishes, you’ve gotta let the bosses know,” Jim told me as he sprayed a stray leaf of iceberg lettuce off a plate. “Work hard and show results.”

Friday night, three weekends later, Aaron stepped quickly into the kitchen, carrying two menus. “Who just bused the back right table?” he shouted.

15 I fumbled the salad bowl I was washing in the lukewarm water. I knew I was guilty, but Aaron’s cold stare didn’t promise a happy reward for the guy who confessed. A mix of fear and my own conscience pushed the response out of my mouth.

“I did, Aaron.”

He whipped around to face me. “What were you thinking? Get back out here and look at what you missed!”

20 Grabbing a bus tub and rag, I followed Aaron out to table twenty-two. As we made our way through the restaurant, Aaron said something about rags, but I didn’t hear over the din of seventeen other conversations going on around us.

We arrived at table twenty-two. It was still clean. Completely.

“Look,” Aaron said, pointing.

25 *Look.* That one syllable crushed whatever confidence I had as I saw and understood. Sure, the table was clean; it was the lake beneath that was the problem. A nearly full cup of Mug Root Beer® had tipped over on the brick floor. Aaron stood at my shoulder,

Mug Root Beer® is the registered trademark of New Century Beverage Company.

apologizing to the elderly couple waiting for their table. Another wave of guilt—bigger than the first—slammed into me. I had so messed up.

30 Aaron glared.

“I’ll take care of it,” I muttered.

“Yes, you will,” he agreed.

With that motivating statement, Aaron turned, apologized once more to the couple, and stormed off to the front of the restaurant. Avoiding the older couple’s gaze, I dropped
35 down to clean up the root beer.

That’s when another problem presented itself. I had brought only one rag. One already damp rag. The lake of root beer mocked me as I leaned over and attempted to wipe up the mess. My wet rag did nothing but smear the puddle and increase its size.

Increase. Increase the number of rags, I thought.

40 I apologized to the couple, who were proving patient, and rushed off to find some dry rags. As I hurried to the kitchen, I hoped Aaron wouldn’t notice my absence for a few seconds.

Frantically, I scanned the kitchen shelves for the stack of rags I had seen days before. Another busboy was leaning against the sink, arms folded.

45 “Whatcha lookin’ for?” he asked.

“Rags. Where are they?”

“To your left, bottom shelf.”

I saw a stack of white cotton rags with a green stripe through the middle. Grabbing five, I rushed out of the kitchen to conquer the lake of soda.

50 I was just passing the oven as Aaron came around the corner of the salad bar. With two deliberate steps, he blocked my way and stood still. Despite the heat pouring from the oven, I froze.

“What are you doing here?” Aaron growled.

55 Fear washed over me. There was no way he would understand. I just needed to get the job done, the job he asked me to do, without interference. Did he think I was trying to slack off?

I attempted, “I needed dry rags . . . to . . . clean . . .”

60 “What?” Aaron seemed ready to rip out tufts of his goatee—an unsanitary practice, at least in a restaurant. “Those customers are waiting right now! I told you to grab four dry rags as you came out! Didn’t you hear me?”

Dinner conversations faded around us. Some teenagers on a double date turned from their pepperoni pizza, nudging each other and pointing. Coworkers glanced at one another, smirking. I could feel the blood rushing to my face, my ears catching on fire.

I mumbled, “I thought. . .”

65 “No, you didn’t. Just go. Get that cleaned up.”

Nostrils flaring, he rushed away. I could almost see drops of irritation flying off him. (Did he want me to clean those up, too?) Avoiding the gaze of coworkers and customers, I walked to table twenty-two and knelt down again on the brick floor. Distracted only by the sound of other dinner conversations and the restaurant radio—playing “Carry On
70 Wayward Son” by Kansas—I introduced the root beer lake to my new rags, cleaning up the mess in a matter of seconds.

I stood, looked at the waiting couple, and said simply, “There you go. I’m sorry about that.” The man, his eyes almost laughing behind his bifocals, stated that he didn’t mind the wait. He guided his wife to her seat and sat down beside her. I wadded up the rags and
75 walked back toward the kitchen, angry with myself, with Aaron, with the maker of Mug Root Beer.

Aaron glanced at me from across the restaurant, as if checking to see whether I had finished the job. Of course I did, I thought, I know how to work. I knew what needed to be done to take care of that mess, once I saw it. I’m sorry I didn’t see it at first. But it’s not
80 going to ever happen again. You can trust me.

I joined the rest of the busboys in the kitchen, washing the Melmac® dishes, replacing them throughout the restaurant as they dried, and busing tables (very carefully) as groups left. Water saturated my shirt as I plowed through the continuous stacks of dishes.

Holding the brush with a vise grip, I scrubbed the plates, maintaining a determined
85 look on my face anytime Aaron was near. I wanted to prove to him, to myself, that my mistake was simply that—a one-time mistake. I clung to the hope that Aaron would notice my effort, understand, and be willing to forgive my blunder.

The lake of root beer weighed on my mind as I rinsed a final stack of bowls. Only as I placed the last bowl on the plastic rack to dry did I realize that my mistake was exactly
90 that—my own. It was my own to dwell on, or my own to let go. Sure, I would still think about it. Who doesn’t remember moments of failure? But remembrance brings a choice: motivation or misery.

Months have passed since that Friday night, and the determined look still comes to my face when I pick up a plastic bus tub. A pang of guilt tries to worm its way into me
95 every time I wring out a fresh rag. But I smile as I glance underneath every table I clean.

Melmac® is the registered trademark of American Cyanamid Company.

Read lines 20 through 22 from the story.

Grabbing a bus tub and rag, I followed Aaron out to table twenty-two. As we made our way through the restaurant, Aaron said something about rags, but I didn't hear over the din of seventeen other conversations going on around us.

Which statement **best** explains how these lines affect the plot of the story?

- A** The incident builds on the advice in lines 10 and 11.
- B** The thoughts are a resolution to the question in line 13.
- C** The words foreshadow the situation in lines 36 and 37.
- D** The actions contrast with the description in line 43.

Read lines 66 and 67 from the story.

I could almost see drops of irritation flying off him. (Did he want me to clean those up, too?)

These lines reveal the narrator's

- A** refusal to comply with the manager's instructions
- B** attempt to anticipate the manager's wishes
- C** misunderstanding of the manager's words
- D** frustration with the manager's demands

Read this sentence from lines 73 and 74 of the story.

The man, his eyes almost laughing behind his bifocals, stated that he didn't mind the wait.

These lines **most** impact the narrator's point of view by

- A** describing the appearance of the elderly man
- B** emphasizing the patience of the couple in the restaurant
- C** showing a conversation between the narrator and a customer
- D** demonstrating that the situation was less serious than imagined

Lines 84 through 87 reveal

- A** Aaron's role in fixing an issue
- B** the narrator's intense resolve to improve
- C** Aaron's inability to forgive a mistake
- D** the narrator's strong sense of responsibility

Read lines 93 through 95 of the story. In the context of this paragraph, which phrase is closest in meaning to "worm"?

- A** start over
- B** take notice
- C** sneak up on
- D** look back at

Read lines 2 and 3 from the story.

I had the feeling that a bright neon sign on my forehead was flashing the message "New Employee."

These words best demonstrate the narrator's feelings of

- A** anticipation of having greater responsibilities
- B** anxiety about revealing a lack of experience
- C** excitement at the thought of beginning a job
- D** concern about meeting high expectations

Read this sentence from line 26 of the story.

Sure, the table was clean; it was the lake beneath that was the problem.

The author refers to the puddle as a lake to

- A** show how concerned the narrator is about the puddle
- B** suggest that the manager is exaggerating the situation
- C** show that the narrator is confused about the size of the puddle
- D** emphasize how unhappy the customers are about the situation

The Summer of 2012—Too Hot to Handle?

by Dauna Coulter

August 3, 2012: This past June more than 170 all-time U.S. heat records were tied or broken—many of them originally set in the historically hotter months of July and August. And with a drought plaguing much of the country, the ground is as dry and crispy as a saltine cracker.

5 By early July, 56% of the contiguous U.S. was experiencing drought. That's the largest percentage in the 12-year record of the U.S. Drought Monitor. Fires scorched over 1.3 million acres across the U.S. in June, reducing hundreds of homes to ashes in the West.

Just imagining prospects for the rest of the summer is enough to bring sweat to your brow. And last winter is partly to blame.

10 "799 daytime heat records were broken in the first five days of January in the U.S.," says Jake Crouch, a climate scientist from the NOAA National Climatic Data Center. "Last year's was the fourth warmest winter since 1895. And it was dry, with a dearth of snowfall in many places. During most of this past winter and spring, a positive North Atlantic Oscillation pressure pattern kept the jet stream further north and the U.S. warmer and
15 drier than normal."

With little moisture in the soil to evaporate and dissipate some of the sun's energy, more solar radiation is converted to sensible heat, he says.

Of course global warming is on the tips of many tongues.

20 "CO₂ is up from 280 parts per million in the 19th century atmosphere to 400 parts per million now—a 43% increase," says NASA climatologist Bill Patzert. "We're emitting six times more carbon from fossil fuel use now than we did 50 years ago. Atmospheric CO₂ hasn't been this high in 400,000 years."

Greenhouse gasses like CO₂ and methane have higher heat capacities than many other gasses, causing the atmosphere to retain more heat.

25 "The atmosphere becomes a heat source itself, radiating heat back onto the Earth. 85 to 90% of that heat is absorbed by the oceans, because water has a high heat capacity. So the oceans expand and rise. Global sea levels have risen 8 inches over the past 130 years, and the average surface temperature of the entire earth (land surface temperatures plus ocean temperatures) has increased 1.6°F. These facts," he asserts, "are
30 unequivocal proof of global warming."

But is the record-setting summer 2012 evidence of climate change?

35 “Not necessarily,” says Patzert. “We’ve always had extreme weather. U.S. history is written in great natural calamities—tornadoes, hurricanes, heat waves, droughts, floods. Global warming is happening, but it would be irresponsible to say that this heat wave and all these broken records are due to global warming from human causes. It’s just not that simple.”

John Christy, a scientist from the University of Alabama in Huntsville, agrees: “Heat waves are a natural part of the climate system, and while the recent heat wave was remarkable, it was not as intense as others in the past.”

40 He offers a few examples of past heat waves and droughts.

“The central U.S. suffered several heat waves in the 1930s—the dust bowl years—when more statewide, all-time record high temperatures were set than in any other decade. And the western U.S. experienced decades-long droughts in the 12th century. So dry were mountain areas that we can still see near-hundred-year-old trees standing upright in the bottom of alpine lakes where they grew on dry ground 900 years ago. This shows that in the 12th century it was so dry and hot that the lakes dried up and allowed trees to grow over a significant period before moisture finally returned.”

50 Patzert and Christy are on opposite sides of the global warming debate. Patzert firmly believes that Earth is warming up and humans are the main reason why. Christy, on the other hand, argues that natural climate variations are almost solely to blame. Yet they both agree that the summer 2012 weather might be just that—weather. They also both believe that improvement is needed in models indicating effects of human and other factors on weather and climate.

55 “Today’s climate models are extremely sophisticated, constantly improving, and will be crucial to charting our future—but they aren’t perfect,” says Patzert.

One component that needs improvement: clouds.

60 “Clouds play a key role in climate because they affect the amount of sunlight reflected and absorbed,” says Christy. “We need higher resolution models to portray them more accurately. The distance between grid measurement points in current models is too great to capture meter to meter variations in clouds, land cover, and other variables that affect climate.”

One more point of agreement: the summer of 2012 *is* too hot to handle.

In this nonfiction essay, a father reflects on his heritage.

The Inheritance of Tools

by Scott Russell Sanders

The hammer had belonged to him, and to his father before him. The three of us have used it to build houses and barns and chicken coops, to upholster chairs and crack walnuts, to make doll furniture and book shelves and jewelry boxes. The head is scratched and pockmarked, like an old plowshare that has been working rocky fields, and it gives off
5 the sort of dull sheen you see on fast creek water in the shade. It is a finishing hammer, about the weight of a bread loaf, too light, really, for framing walls, too heavy for cabinetwork, with a curved claw for pulling nails, a rounded head for pounding, a fluted neck for looks, and a hickory handle for strength.

The present handle is my third one, bought from a lumberyard in Tennessee down the
10 road from where my brother and I were helping my father build his retirement house. I broke the previous one by trying to pull sixteen-penny nails out of floor joists—a foolish thing to do with a finishing hammer, as my father pointed out. “You ever hear of a crowbar?” he said. No telling how many handles he and my grandfather had gone through before me. My grandfather used to cut down hickory trees on his farm, saw them into
15 slabs, cure the planks in his hayloft, and carve handles with a drawknife. The grain in hickory is crooked and knotty, and therefore rough, hard to split, like the grain in the two men who owned this hammer before me.

After proposing marriage to a neighbor girl, my grandfather used this hammer to
20 build a house for his bride on a stretch of river bottom in northern Mississippi. The lumber for the place, like the hickory for the handle, was cut on his own land. By the day of the wedding he had not quite finished the house, and so right after the ceremony he took his wife home and put her to work. My grandmother had worn her Sunday dress for the wedding, with a fringe of lace tacked on around the hem in honor of the occasion. She removed this lace and folded it away before going out to help my grandfather nail siding
25 on the house. “There she was in her good dress,” he told me some fifty-odd years after that wedding day, “holding up them long pieces of clapboard while I hammered, and together we got the place covered up before dark.” As the family grew to four, six, eight, and eventually thirteen, my grandfather used this hammer to enlarge his house room by room, like a chambered nautilus expanding his shell.

30 By and by the hammer was passed along to my father. One day he was up on the roof
of our pony barn nailing shingles with it, when I stepped out the kitchen door to call him
for supper. Before I could yell, something about the sight of him straddling the spine of
that roof and swinging the hammer caught my eye and made me hold my tongue. I was
five or six years old, and the world's commonplaces were still news to me. He would pull a
35 nail from the pouch at his waist, bring the hammer down, and a moment later the *thunk*
of the blow would reach my ears. And that is what had stopped me in my tracks and
stilled my tongue, that momentary gap between seeing and hearing the blow. Instead of
yelling from the kitchen door, I ran to the barn and climbed two rungs up the ladder—as
far as I was allowed to go—and spoke quietly to my father. On our walk to the house he
40 explained that sound takes time to make its way through air. Suddenly the world seemed
larger, the air more dense, if sound could be held back like any ordinary traveler.

By the time I started using this hammer, at about the age when I discovered the speed
of sound, it already contained houses and mysteries for me. The smooth handle was one
my grandfather had made. In those days I needed both hands to swing it. My father would
45 start a nail in a scrap of wood, and I would pound away until I bent it over.

"Looks like you got ahold of some of those rubber nails," he would tell me. "Here, let
me see if I can find you some stiff ones." And he would rummage in a drawer until he
came up with a fistful of more cooperative nails. "Look at the head," he would tell me.
"Don't look at your hands, don't look at the hammer. Just look at the head of that nail and
50 pretty soon you'll learn to hit it square."

Pretty soon I did learn. While he worked in the garage cutting dovetail joints for a
drawer or skinning a deer or tuning an engine, I would hammer nails. I made innocent
blocks of wood look like porcupines. He did not talk much in the midst of his tools, but
he kept up a nearly ceaseless humming, slipping in and out of a dozen tunes in an
55 afternoon, often running back over the same stretch of melody again and again, as if
searching for a way out. When the humming did cease, I knew he was faced with a task
requiring great delicacy or concentration, and I took care not to distract him.

What character traits of the grandfather are revealed through his use of the hammer? Use **two** details from the passage to support your response.

In this fictional account, a biographer named Margaret talks about her father's bookstore.

Margaret's Story

by Dianne Setterfield

5 Rising from the stairs, I stepped into the darkness of the shop. I didn't need the light switch to find my way. I know the shop the way you know the places of your childhood. Instantly the smell of leather and old paper was soothing. I ran my fingertips along the spines, like a pianist along his keyboard. Each book has its own individual note: the grainy, linen-covered spine of Daniel's *History of Map Making*, the cracked leather of Lakunin's minutes from the meetings of the St. Petersburg Cartographic Academy; a well-worn folder that contains his maps, hand-drawn, hand-colored. You could blindfold me and position me anywhere on the three floors of this shop, and I could tell you from the books under my fingertips where I was.

10 We see few customers in Lea's Antiquarian Booksellers, a scant half-dozen a day on average. There is a flurry of activity in September when the students come to buy copies of the new year's set texts; another in May when they bring them back after the exams. These books my father calls migratory. At other times of the year we can go days without seeing a client. Every summer brings the odd tourist who, having wandered off the beaten track, is prompted by curiosity to step out of the sunshine and into the shop, where he pauses
15 for an instant, blinking as his eyes adjust. Depending on how weary he is of eating ice cream and watching the punts¹ on the river, he might stay for a bit of shade and tranquillity or he might not. More commonly visitors to the shop are people who, having heard about us from a friend of a friend, and finding themselves near Cambridge, have
20 made a special detour. They have anticipation on their faces as they step into the shop, and not infrequently apologize for disturbing us. They are nice people, as quiet and as amiable as the books themselves. But mostly it is just Father, me and the books.

25 How do they make ends meet? you might think, if you saw how few customers come and go. But you see, the shop is, in financial terms, just a sideline. The proper business takes place elsewhere. We make our living on the basis of perhaps half a dozen transactions a year. This is how it works: Father knows all the world's great collectors, and he knows the world's great collections. If you were to watch him at the auctions or book fairs that he attends frequently, you would notice how often he is approached by quietly

¹punts: a type of boat

spoken, quietly dressed individuals, who draw him aside for a quiet word. Their eyes are
30 anything but quiet. *Does he know of . . .* they ask him, and *Has he ever heard whether . . .*
A book will be mentioned. Father answers vaguely. It doesn't do to build up hope. These
things usually lead nowhere. But on the other hand, if he were to hear anything . . . And if
he doesn't already have it, he makes a note of the person's address in a little green
notebook. Then nothing happens for quite some time. But later—a few months or many
35 months, there is no knowing—at another auction or book fair, seeing a certain other
person, he will inquire, very tentatively, whether . . . and again the book is mentioned.
More often than not, it ends there. But sometimes, following the conversations, there may
be an exchange of letters. Father spends a great deal of time composing letters. In French,
German, Italian, even occasionally Latin. Nine times out of ten the answer is a courteous
40 two-line refusal. But sometimes—half a dozen times a year—the reply is the prelude to a
journey. A journey in which Father collects a book here, and delivers it there. He is rarely
gone for more than forty-eight hours. Six times a year. *This* is our livelihood.

The shop itself makes next to no money. It is a place to write and receive letters. A
place to while away the hours waiting for the next international bookfair. In the opinion of
45 our bank manager, it is an indulgence, one that my father's success entitles him to. Yet in
reality—my father's reality and mine; I don't pretend reality is the same for everyone—the
shop is the very heart of the affair. It is a repository of books, a place of safety for all the
volumes, once so lovingly written, that at present no one seems to want.

And it is a place to read.

50 A is for Austen, B is for Brontë, C is for Charles and D is for Dickens. I learned my
alphabet in this shop. My father walking along the shelves, me in his arms, explaining
alphabetization at the same time as he taught me to spell. I learned to write there, too:
copying out names and titles onto index cards that are still there in our filing box, thirty
years later. The shop was both my home and my job. It was a better school for me than
55 school ever was, and afterward it was my own private university. It was my life.

My father never put a book into my hands and never forbade a book. Instead, he let
me roam and graze, making my own more and less appropriate selections. I read gory
tales of historic heroism that nineteenth-century parents thought were suitable for
children, and gothic ghost stories that were surely not; I read accounts of arduous travel
60 through treacherous lands undertaken by spinsters in crinolines, and I read handbooks on
decorum and etiquette intended for young ladies of good family; I read books with
pictures and books without; books in English, books in French, books in languages I didn't
understand, where I could make up stories in my head on the basis of a handful of
guessed-at words. Books. Books. And books.

133080046

What effect does the author create through the description of the bookstore? Use **two** details from the passage to support your response.

What does the phrase “private university” (line 55) reveal about the narrator and her father?
Use two details from the passage to support your response.
