

## **PLAYGROUND**

## by Douglas Evans

There are goats on our playground. Faith and the rest of her class stood on the edge of the playground asphalt. A red plastic fence separated them from a weedy hill that ran up to the baseball field. Beyond the fence, a herd of shaggy goats munched on weeds and brambles.

"Why are there goats on our playground?" Faith asked.

Faith's teacher nodded toward a man standing among the herd. "Let's ask the goat shepherd," she said.

The man's name was Mr. Escobar, and he was from Chile. He wore a hooded sweatshirt that said GOATS 4 HIRE on the front and held a long staff with a hook on one end.

The shepherd smiled at the children lining the red fence. "My sixty goats are here for weed management," he said. "They will eat the undesirable plants that grow on this hill, including thistles and poison oak, plants that are hard to remove by hand."

"Renting goats to clear this hill is also a lot safer than using herbicides," said the teacher.

"And, of course, everything my goats eat gets recycled as fertilizer for the soil," said Mr. Escobar.

The class giggled.

"What's that pole for?" asked Faith.

The shepherd held up the staff with the hook on top. "This is a goat herder's crook," he said. "The hook is used to grab stray goats. But I don't use it much. My dog, Charlie, catches most of the runaways. Goats are very intelligent, and their curiosity lead to many escape attempts."

Here the shepherd whistled, and a black and white dog ran up to him. The dog crouched by the man's feet, eyeing the children.

"Charlie is a border collie," said the shepherd. "He's trained to herd goats. Charlie's a big help keeping them in a group while I move the fence between fields." The man rubbed Charlie behind the ear. "He also protects the goats at night from predators."

While the shepherd talked, Faith studied the goats. A black one with curly

horns munched on a small scrub. A brown and white one chewed on a dandelion, while a caramel-colored one stood on his hind legs pulling leaves off a thorny bush. An idea was forming in Faith's head. Maybe here was an answer to a problem she'd been dwelling on all week. What project could she do for the school science fair?

"I'll do my science project on goats," she said softly.

A boy next to her laughed. "Billy goats aren't science, Faith," he said.

"Goats just eat weeds and stuff," said a girl. "That's not science."

Faith was surprised to see Mr. Escobar smiling at her. He had overheard her idea.

"Goats are a remarkable animal, Faith," he said. "Come back later, and I'll show you something unique about goats that scientists have been studying for year."

After school, Faith returned to the playground with her older brother, Cole. Cole doubted goats could be a good subject for the science fair, but his mother made him come. The goat enclosure had been moved farther up the hill, and Charlie crouched among the herd. Mr. Escobar, however, was nowhere to be seen.

Faith pointed to a silver trailer in the school parking lot. A curl of smoke rose from a pipe on the roof. "The shepherd must be in there," she said.

The sister and brother walked over to the trailer and knocked on the side door. It opened and Mr. Escobar stood there holding a frying pan. He wore the

same hooded sweatshirt he had on earlier

"Hello, Faith," he said, smiling. "I'm glad you came for a visit."

Faith nodded to her brother. "This is, Cole, my brother."

"Faith said you might be able to help her with a science project," said Cole.

The shepherd set the pan on a counter. "Exactly," he said, stepping out the door. "I think you'll find this interesting."

The man led Faith and Cole to the end of the trailer where a tan-colored nanny goat was munching on a pile of alfalfa hay. Nearby two baby goats, the color of cotton, lay in a pen.

"Meet Gertrude," Mr. Escobar said. "Those are her two kids, Pan and Pin, born just last week. Gertrude is my milk supply, so she doesn't eat weeds with the others."

The goat looked up and bleated. The two kid goats bleated a return. They sounded much like crying children.

"Now, Faith and Cole, look closely at Gertrude's eyes and tell me what you see," the shepherd said.

Faith always found goat faces funny. She couldn't help laughing as she looked at Gertrude's wide mouth that seemed forever smiling, her shaggy white beard hanging from a narrow chin. and her yellow eyes set to the side near two floppy ears. But those eyes! There was something about them, something she hadn't noticed before.

"Gertrude's eye pupils are slits," she said. "Horizontal slits."

"Exactly," said the shepherd. "Not round like our pupils."

"Why?" asked Faith. "Why do goats have eyes like that?"

That's what scientists have been asking, and they think they've found the answer," said the shepherd. "Goats are a grazing animals, you see, and their sideway slit pupils give them a wider field of vision. That way they can better look out for predators."

"Is that also why Gertrude's eyes are at the side of her head?" asked Cole.

The shepherd nodded. "Even more amazing, watch Gertrude's slit pupils as she raises and lowers her head to eat the alfalfa."

The man made a clicking sound and the goat raised her head. She bleated and lowered it again."

"Her pupils didn't move," said Faith. "Her eye slits remained parallel to the ground."

Exactly. Gertrude can rotate her eyes ten time farther than a human can.

That way she can see her enemies even while chowing down."

"Goat eyes!" Faith called out. "That's what my science project can be about.

What are the benefits of having eyes like Gertrude's?"

"That's exactly what I was thinking," said Mr. Escobar.

"A science project about how goats see," said Cole, shaking his head. "Who would have imagined?"

"And speaking of seeing," said the shepherd. "It's almost sunset. Charlie and I can use your help to move the goats one more time before it gets dark."

Moving the herd was fun. While Mr. Escobar dragged the red fence farther along the hill, Charlie, Faith, and Cole kept the goats together. The border collie did most of the work. He ran back and forth, barking, and charging any goat that went astray. Mr. Escobar lent Faith his goat shepherd's crook, and she use it to block any goat that tried to run past her. When the fence was in place again, everyone slowly led the goats, bleating and baaing, into the enclosure.

"Well done," the shepherd told Faith and Cole as they were leaving. "I'll be on your school grounds another two weeks. When is the science fair?

"Next week," Faith said.

"Then, if you'd like, I could lend you Gertrude for your presentation."

"She's just what I need," said Faith.

The school science fair took place on the playground. Each student had a small area in which to demonstrate his or her project. In her space, Faith set up a card table with a display board on it. On the board was the title of her project, Why Grazing Animals Have Horizontal Slit Pupils, and beneath the title were pictures of horse, deer, and goat eyes.

Faith had also written a paper about a goat's unique ability to rotate its eyes while grazing. If anyone doubted this, Gertrude, the nanny goat, stood in a pen next to the table, eating alfalfa to prove it.

"See how Gertrude's eye slits remain parallel to the ground as her head goes up and down, up and down," Faith told a crowd that gathered at her display.

"It's all very scientific."