



SCHOOL JOURNAL

August 2015



TITLE	READING YEAR LEVEL
Spirit of the Bird	6
Thirst	6
The Leather Satchel	5
Boost	5
No Rhyme	6
Clowning Around	5
Richard Owen's Giant Mystery	6

This Journal supports learning across the New Zealand Curriculum at level 3. It supports literacy learning by providing opportunities for students to develop the knowledge and skills they need to meet the reading demands of the curriculum at this level. Each text has been carefully levelled in relation to these demands; its reading year level is indicated above.

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Spirit of the Bird

by Ben Brown

It is the hunting season in the new land. For Pai and her people, the long days of summer mean work. It is time to find moa. But Pai would rather not hunt. She has other things on her mind, things like painting.

“She’s our dreamer, that one,” her father often says.

“This place needs its dreamers,” is her grandmother’s answer.

Pai has dreamt all her ten years in the new land. She is always gazing up at the night sky. Grandmother has taught Pai the names of the heavens. Pai can’t believe there are only twelve of them. She is sure there must be more. But her grandmother knows these things – and Pai knows not to question her.

The heavens contain the stars that guide her people, the stars that mark the seasons throughout the year. And there are still so many of them left to name ...

Each year, the trail to the hunting ground grows longer. The great birds are becoming harder to find. Now, each moa is a prize: a treasure of meat and bone and soft, warm feathers. The people have hunted the bird ever since they arrived in the new land, but there are not so many moa any more.

It is only the people who have grown in number.

The hunting trail takes them deeper into the valley, where the mountains begin to rise and the river starts its journey, where there is still hope that the great birds will be found.

Pai and her whānau make camp in a cave at the foot of one of these mountains.



Grandmother remembers when huge flocks of the birds were driven with fire. She remembers when clutches of their eggs were plentiful. The people in Grandmother's day had named the birds moa, after the chickens of their homeland. But these birds were no chickens. Some of their eggs were bigger than chickens, and some of their hatchlings grew to be bigger than people. So many fishhooks and spear points and needles and combs in one leg bone.

Pai wears a comb made from moa bone.

Her father wields a spear pointed in bone.

Grandmother wears a cloak of warm reddish-brown feathers.



Pai has been given the job of looking for the eggs. They are enormous yet surprisingly fragile, and Pai has gentle hands. The work saddens her, whether she finds any eggs or not. Pai knows the hunt sustains her whānau. She knows the moa is a gift. She also knows that each egg gathered is a great bird that will never be.

When Pai is sad, she turns to her dreaming. This evening, by the firelight, she will begin a picture on the cave wall. What will be in the picture? That remains to be dreamt.



*Tuatahi, moemoeā te āhua.
Whakapūhake me te whitinga.
Tapahi te ao me te pō.
Takoto rā ngā mea katoa.*

*First, dream the image.
Fill it with light.
Cut it with darkness.
Therein lies everything.*

Pai has searched for much of the morning without success. Old nests, broken shells, lost feathers ... but no eggs. The hunters have taken only one bird so far. One bird will not feed all her people. So Pai continues searching into the afternoon. The shadows lengthen, and the light changes tone as evening rises beyond the mountains.

Then, in the changing light, she sees a sign of moa – bark shredded from a particular tree at a particular height. An adult moa has been working on its nest. Pai will recognise this spot in the morning. It is a beautiful tree. In the meantime, she must return to camp before night falls. Now she knows what she will paint on the cave wall.



Pai paints a tree inhabited by the spirit of a bird. She marvels that such a tree lives in the company of moa. In the past, forests were burnt during the hunt. Now it is not so. And now, in her painting, the spirit of the moa is allowed to grow ...

Pai sets off early the next morning. She retraces her steps from the day before, feeling as fresh and new as the rising mist. She finds the tree with the mark of the moa. Moving outwards, she looks for other signs: certain branches nibbled and cut; scrapings in the undergrowth; and, best of all, the bird's droppings. Somewhere an adult moa is foraging, perhaps with a young one in the nest.

There! What's that?

A movement, the brush of ferns across a large, feathered body. The curious probe of a keen head pushing through foliage. Pai can see a lone moa stepping cautiously through the forest. The bird is as tall as Pai – probably even taller – and it seems at this moment to be especially alert.

Three or four steps ... pause ... look this way and that ... move on ... careful and quiet.

Pai feels the excitement of a hunter, the thrill of seeing and not being seen. She does not feel sad as she silently tracks the great creature through the forest. She has decided that today, she is not here to hunt or to gather eggs. She is here to dream. *Rare gifts of great birds, a tree with a bird's spirit, unnamed stars.*

And still the moa makes its way. Stepping. Pausing. Looking. Listening.

At the top of a rise, there is a wall of rock where the forest ends and yet another mountain begins. The moa has made its home beneath this mountain. Nestled in a cleft, it has built a bed of twigs and barks and grasses. In this bed nest, another great bird has begun its journey. The chick is hungry. Pai cannot help herself. She must get closer. She moves, and the great bird turns its head.

"I see you!" it says.

"Feed me!" clatters the chick.

"I will make a picture of you," says Pai. "That is all."

She turns and walks away.

Beside the mark of the tree with the bird spirit, Pai paints the image of a great bird beneath a mountain – and a human without a bird spear. Tomorrow she will add stars.

"Is that what you saw today, Pai?" asks her father.

"No," Pai replies. "It was only a dream."

illustrations by Tom Simpson



No Rhyme

Maybe it's true that in your poem, the breeze
disturbs the leaves on the vague, poetic trees.

But look closer. Notice how this breeze
makes the dragonfly's transparent wings
flatten and lift as it clings to a leaf stem.
It's a delicate adjustment
for the dragonfly, but for you –
a far more interesting disturbance.

And maybe it's true that the cat,
in your poem, sat on the mat.

But imagine what might happen
if the cat sat on the piano instead. And then
if the cat were to get up and step lightly
on the keys, making a new music: strange,
unpredictable sounds that, until now,
the world has never heard.

Tim Upperton





Clowning Around

BY WAYNE ERB

Saturday Afternoon at Starship

It's Saturday afternoon at Starship hospital's emergency department. A sick boy is upset. The boy and his family speak little English, and the staff are having problems explaining to them what needs to be done. One of the nurses goes to get help. She returns with someone unexpected. Although the friendly figure has a white coat, she also wears a red plastic nose. This is Doctor U Who, one of the hospital's clown doctors.

From what Doctor U Who sees, she guesses the boy is scared and his bloodstream is flooded with the natural chemicals that are released when a person is stressed. His arm is tensed up, just as the nurse needs it to relax. Doctor U Who quickly decides how she can help. She suddenly goes floppy. Her performance is very funny, and the boy watches intently. Eventually, with the clown's help, he calms down, and the staff are able to get on with their job.

"When I left, I walked down the corridor in a ridiculous way," Doctor U Who later said. "The boy came to the door to watch. He was fascinated. But more importantly, he was now completely calm. His family looked very relieved."



a+s+c=fun
AUCKLAND
DISTRICT HUMOUR BOARD



Te Haha Haha Klowns



Dr. U WHO



CLOWN DOCTORS
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EXCLUSIVE SPONSOR FOR STARSHIP HOSPITAL, AUCKLAND



Serious Work

Doctor U Who's real name is Jude Bishop. She's one of twelve clown doctors who work at Starship, the national children's hospital in Auckland. Other clown doctors work in hospitals in Christchurch and Wellington. Most of them have a background in theatre, circus, or puppetry – and sometimes all three. While they're not doctors, they are specially trained to work in hospital wards and emergency departments. Some clown doctors have studied medical clowning at university.

Like all clowns, the clown doctor's main tool is humour. "It's quite straightforward really," Jude says. "We use our 'characters' to establish a rapport with kids, then we make them laugh!" Often working in pairs, the clown doctors sing, play the ukulele, perform funny mimes, play tricks on each other, and basically act the fool. It might not look like it – but this is serious work!

"We make a real difference to how young patients feel," Jude says. "We distract children from all kinds of medical procedures, and we reduce their levels of stress and anxiety. This empowers kids in situations in which they have little control. We give them back a little bit of that control."

Jude says their work helps everyone: the children, their families, and even the hospital staff. "Laughter is a powerful tool," she says. "Sometimes it really is the best medicine." The doctors and nurses at Starship agree.



“ There’s a really strong link between how you feel and how quickly your body heals. If a person’s feeling more confident, more cheerful, more optimistic ... then they’ll probably get out of hospital sooner. They’re also likely to get better quicker, no matter what the problem is. ”

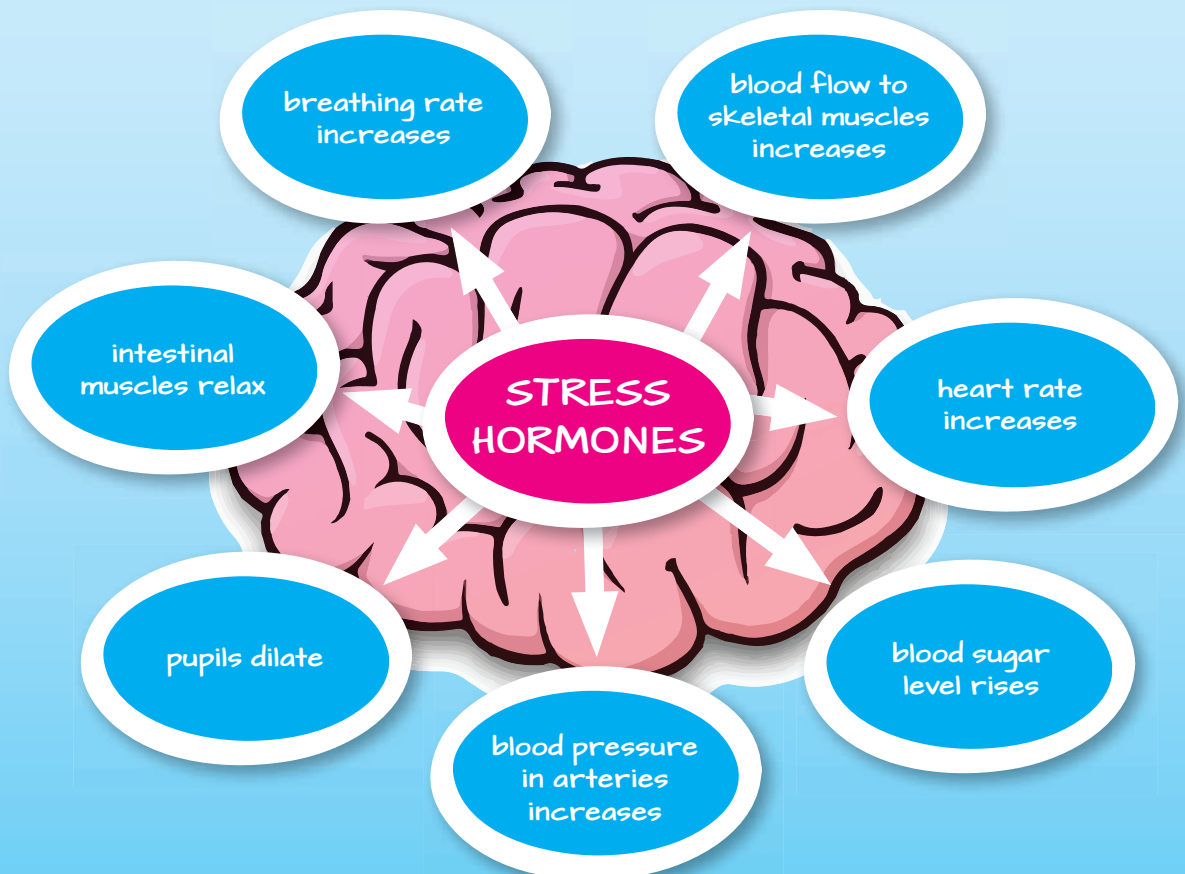
– Richard Aickin, emergency medicine specialist



Laughter: The Best Medicine

When a person is helped to feel less stressed – for example, by laughing at a clown – a positive change happens to the mix of hormones in their blood. Hormones are the natural chemicals that tell our bodies how to react to certain situations. Think about how you feel when you’ve climbed a big hill and finally reached the top (elated) compared with how you feel when you’re being chased by a dog (scared). These feelings are caused by hormones.

Over the last few decades, scientists have learnt a lot more about the important role hormones have to play when it comes to a patient’s recovery. “Hormones allow a person’s mind to communicate with their immune system,” says Roger Booth, a medical scientist who has studied how the body heals itself. “And our immune system helps our body to deal with illness.”



So if a person's mind can communicate with their immune system, does this mean a stressed mind sends bad advice?

"That's one way of putting it," says Roger. "But, yes, we've learnt that bad thoughts and feelings can have a negative effect on your immune system, although some of this happens unconsciously. Long-term stress can definitely delay a person's recovery."

On the flip side, happy feelings help us to get better. "Laughter changes our hormone balance," explains Roger. "It reduces the stress hormones, replacing them with the hormones that make us feel good." These feel-good hormones send a positive message to a person's immune system. They tell it to get on with the process of healing.

But of course the clown doctors already know this!





Doctor U Who and Jolene

Jolene has a broken leg. She's waiting to transfer to Palmerston North hospital, which is much closer to her home in Levin. Doctor U Who stops by to chat. This quickly leads to ridiculous card tricks (Jude's "deck" contains just two cards). Doctor U Who also plays music from a tiny trumpet and takes Jolene joyriding in the corridor. The two have a lot of fun before Jolene watches Jude move off, her handbag bulging with props, in search of other kids to entertain. How would Jolene describe the clown doctors? "Goofy – and they over-exaggerate everything. I find them really funny."

Jolene was born with a condition that causes problems with her blood vessels. This means she's a frequent visitor to hospital, something she has learnt to cope with. As well as talking with her best friend on the phone, having a laugh with the clown doctors leaves Jolene feeling much better. "The clowning around never stops," she says, "and the good feelings they bring stay with me."







Tools of the Trade

The peg earrings are a laugh. The dress looks very cheerful. The red nose ... it's essential! All these props help Jude to become Doctor U Who. But what about that large, spotted handbag she carries? What does Jude keep in there? She's more than happy to share her secrets:

- Stickers (lots of them)
- Maracas
- Spare red noses (for the patients)
- Toilet paper (to make finishing lines for running races, seatbelts for wheelchairs, and so on)
- A fly swat (although, of course, it's not a fly swat – it's a hand-powered air-conditioner, a cricket bat, a guitar, a frying pan ... it all depends on the occasion).



Different Needs

Sometimes, clown doctors leave their props in their bags. Not every patient is in the mood for a laugh. “You have to deal with each person as you find them,” says Jude, “and always remember that people have different needs. This is an important part of our training.”

Jude says that a clown doctor will never ask a patient point-blank how he or she is feeling. Instead, they are taught to read a child’s face. To make a connection, clown doctors also look for clues in the room. Things such as a soft toy or book make great starting places for a conversation.

For Jude, each day is a learning experience. She remembers one girl especially: “She was flat on her back, unable to move. Only her head poked out from the top of her sheet, but the nurse said she could hear everything.” This gave Jude an idea.

“I said I would like to sing her a song if that was OK. When I finished, the girl moved her head and rubbed her cheek against my hand. She wanted to say thank you. That was a very special moment for me. I felt like I had made a difference.”

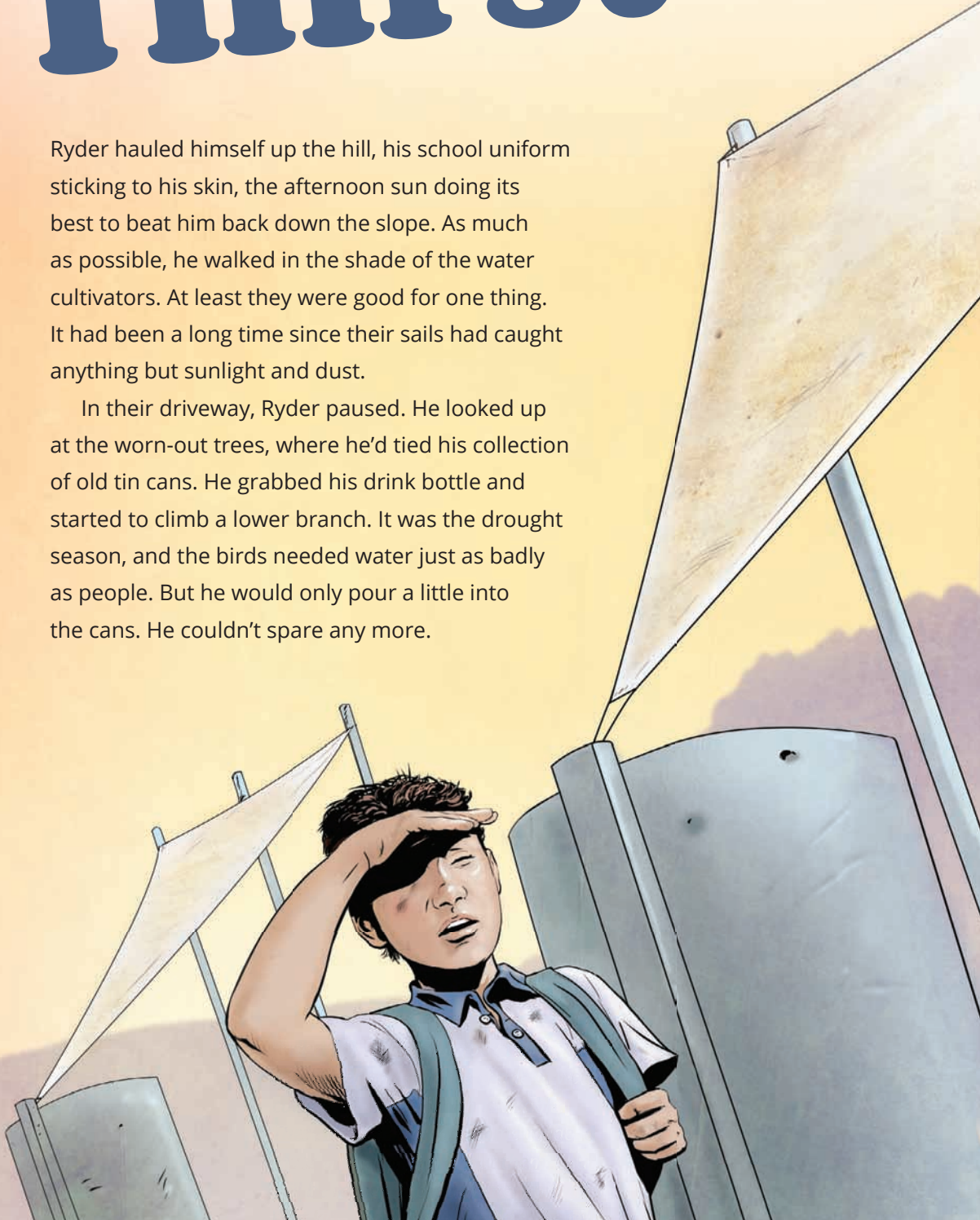


Thirst

by Paul Mason

Ryder hauled himself up the hill, his school uniform sticking to his skin, the afternoon sun doing its best to beat him back down the slope. As much as possible, he walked in the shade of the water cultivators. At least they were good for one thing. It had been a long time since their sails had caught anything but sunlight and dust.

In their driveway, Ryder paused. He looked up at the worn-out trees, where he'd tied his collection of old tin cans. He grabbed his drink bottle and started to climb a lower branch. It was the drought season, and the birds needed water just as badly as people. But he would only pour a little into the cans. He couldn't spare any more.





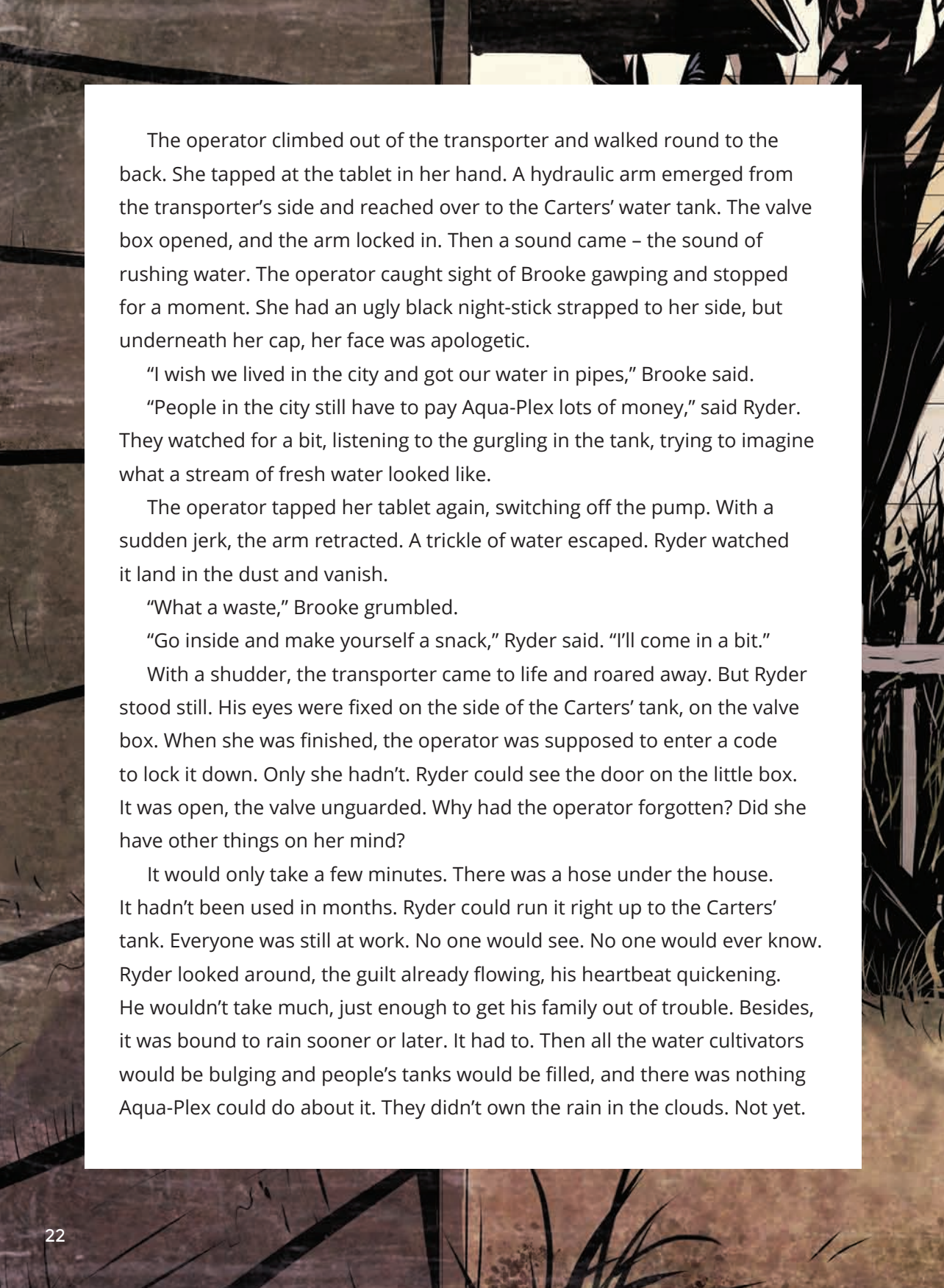
“Better not let Dad know you’re wasting water like that!” Brooke called, pointing at the cans hanging like a jumble of strange fruit.

Ryder paused. “He won’t know if you don’t tell him,” he said. He had meant to carry on pouring but now thought better of it. “It’s not a waste,” Ryder grumbled, backing down the tree. “Birds have to drink, too.”

Brooke was about to say something back – something smart – but was cut off by the whine of an engine. They turned to see a transporter pull up at the Carters’ house, the command “Aqua-Plex™ Quench Your Thirst!” splashed across its side.

“It’s not fair. They’re always getting water,” said Brooke. “Why doesn’t Aqua-Plex ever come to our place?”

“You know why,” said Ryder. He glanced at his sister’s school clothes, not washed in a month, at the paint peeling off their house like sunburnt skin, at their car in the driveway, too broke to fix. Brooke followed his gaze.



The operator climbed out of the transporter and walked round to the back. She tapped at the tablet in her hand. A hydraulic arm emerged from the transporter's side and reached over to the Carters' water tank. The valve box opened, and the arm locked in. Then a sound came – the sound of rushing water. The operator caught sight of Brooke gaping and stopped for a moment. She had an ugly black night-stick strapped to her side, but underneath her cap, her face was apologetic.

"I wish we lived in the city and got our water in pipes," Brooke said.

"People in the city still have to pay Aqua-Plex lots of money," said Ryder. They watched for a bit, listening to the gurgling in the tank, trying to imagine what a stream of fresh water looked like.

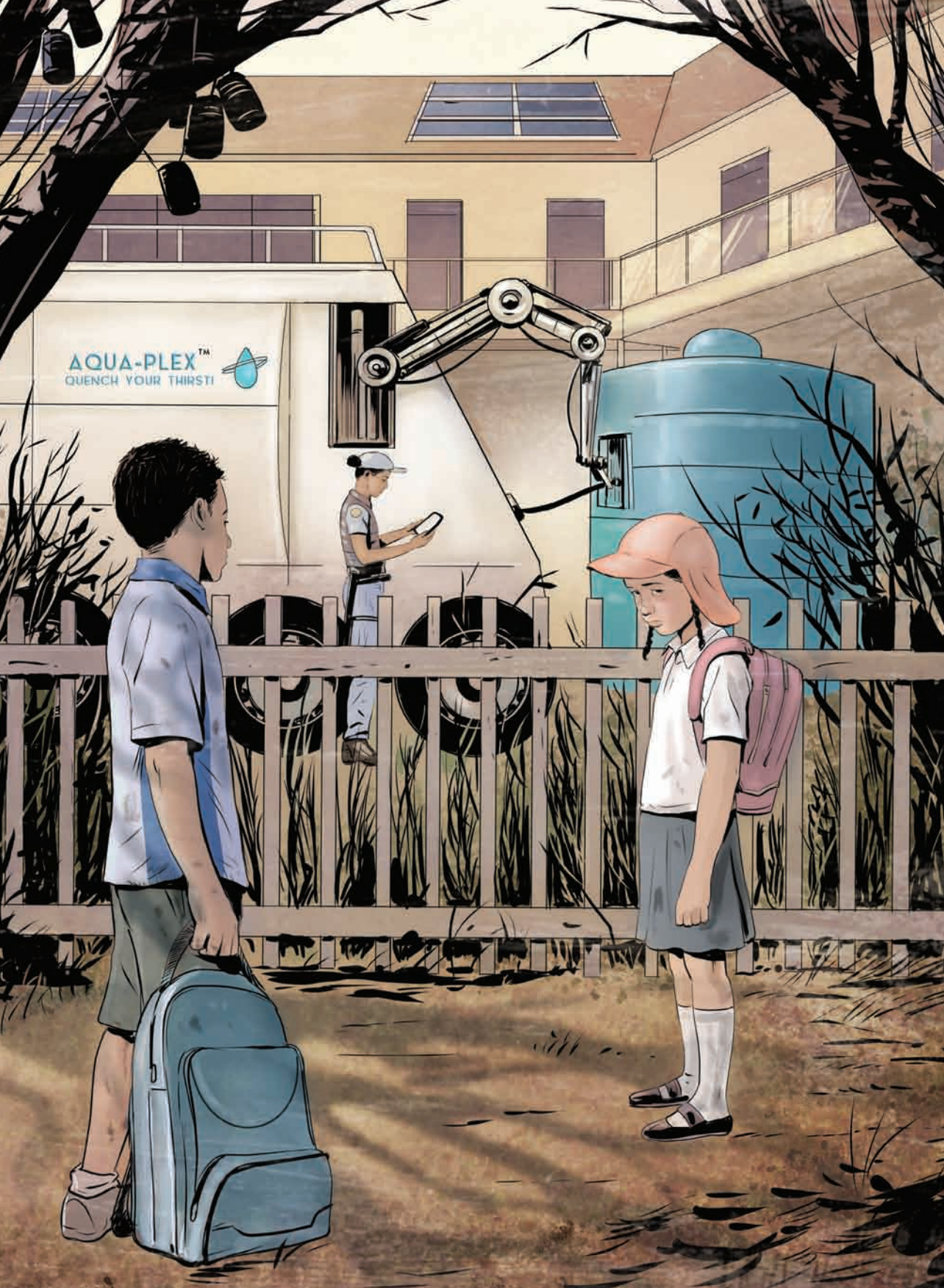
The operator tapped her tablet again, switching off the pump. With a sudden jerk, the arm retracted. A trickle of water escaped. Ryder watched it land in the dust and vanish.

"What a waste," Brooke grumbled.

"Go inside and make yourself a snack," Ryder said. "I'll come in a bit."

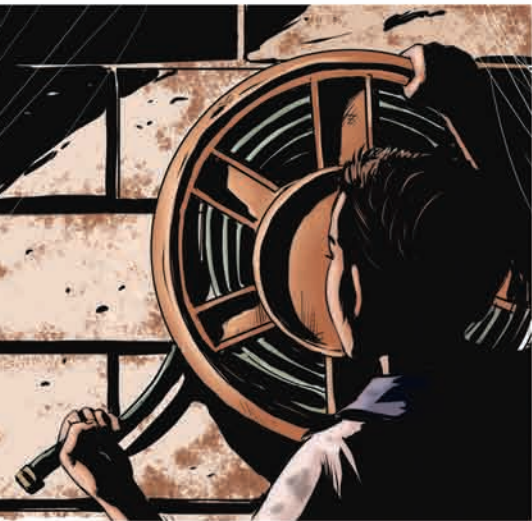
With a shudder, the transporter came to life and roared away. But Ryder stood still. His eyes were fixed on the side of the Carters' tank, on the valve box. When she was finished, the operator was supposed to enter a code to lock it down. Only she hadn't. Ryder could see the door on the little box. It was open, the valve unguarded. Why had the operator forgotten? Did she have other things on her mind?

It would only take a few minutes. There was a hose under the house. It hadn't been used in months. Ryder could run it right up to the Carters' tank. Everyone was still at work. No one would see. No one would ever know. Ryder looked around, the guilt already flowing, his heartbeat quickening. He wouldn't take much, just enough to get his family out of trouble. Besides, it was bound to rain sooner or later. It had to. Then all the water cultivators would be bulging and people's tanks would be filled, and there was nothing Aqua-Plex could do about it. They didn't own the rain in the clouds. Not yet.



AQUA-PLEX™
QUENCH YOUR THIRST!

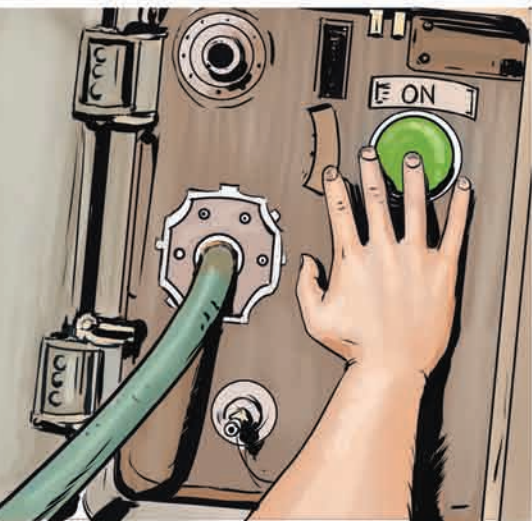




Ryder stood for a moment, working things through. Then he threw his school bag onto the porch and charged down the basement steps. The hose was hanging where Dad always kept it, covered in dust. Ryder lifted it down. Looking, listening, he crawled out from the side of the house, hauling the coil behind him. His clothes rasped against the ground. A little dirt didn't matter – they would be able to run the washing machine tonight. Ryder took one end of the hose and climbed onto their water tank, now little more than a hollow shell. He attached the hose to the valve. Then, quickly, he jumped down.



Ryder carefully picked his way across their parched lawn, taking care not to step on the plastic lids that covered the water stills dug into the earth. He could hear faint music coming from Brooke's room. He poked the hose through the fence before scrambling after it. Then he dragged it up to the Carters' swollen tank.



With every step, he was sure he'd hear a call. "Hey, what are you doing? Thief!" But there was nothing. The Carters' place was deserted. Ryder took a deep breath. He'd gone too far to turn back now. Instead, he jammed the other end of the hose onto the Carters' valve. Licking his dry lips, Ryder punched the green button.

That evening, Mum and Dad got back at the same time, pushing their bikes together up the hill. Their company boiler suits were darkened with sweat. When they got through the door, Brooke jumped on Mum, babbling a torrent of words about her day. "Just give me a moment," Mum said, laughing. "I need to catch my breath."

Dad disconnected his headset and dumped his mini-console on the kitchen table. He turned it off with a stab of his finger. The words "Work-Plex™ Work for Your Dreams!" twitched on the tiny screen before fading away. Dad didn't care – there was no way he was online tonight. He dropped into a chair.

Mum suddenly pulled back from her daughter. "Is your hair damp?" she asked, the smile falling from her face.

Brooke looked at the floor, colour filling her cheeks.

Mum held Brooke at arm's length. "Answer me," she said firmly.

Brooke nodded. "I had a shower."

"You did what?" growled Dad, suddenly alert.

"Had a shower," Brooke whispered.

"A shower?" said Dad. "You know we barely have enough water to keep us alive!"

Brooke's eyes filled up. "Ryder got some more. He said I could."



“Got water? Where from?” said Mum. “Brooke? Where did your brother get water from?”

Now the tears fell down Brooke’s cheeks. “He said it would be OK. He said no one would ever find out.”

“Ryder!” Dad called. “Come here, right now!” But there was no sound from inside the house. “No one touches another drop!” Dad ordered. He went to the front door and threw it open and stalked outside. “Ryder!” he called into the darkening sky. “Ryder!”

Dad shouted once more. His voice rumbled through the trees, scattering the birds that had been perched at the cans quenching their thirst.





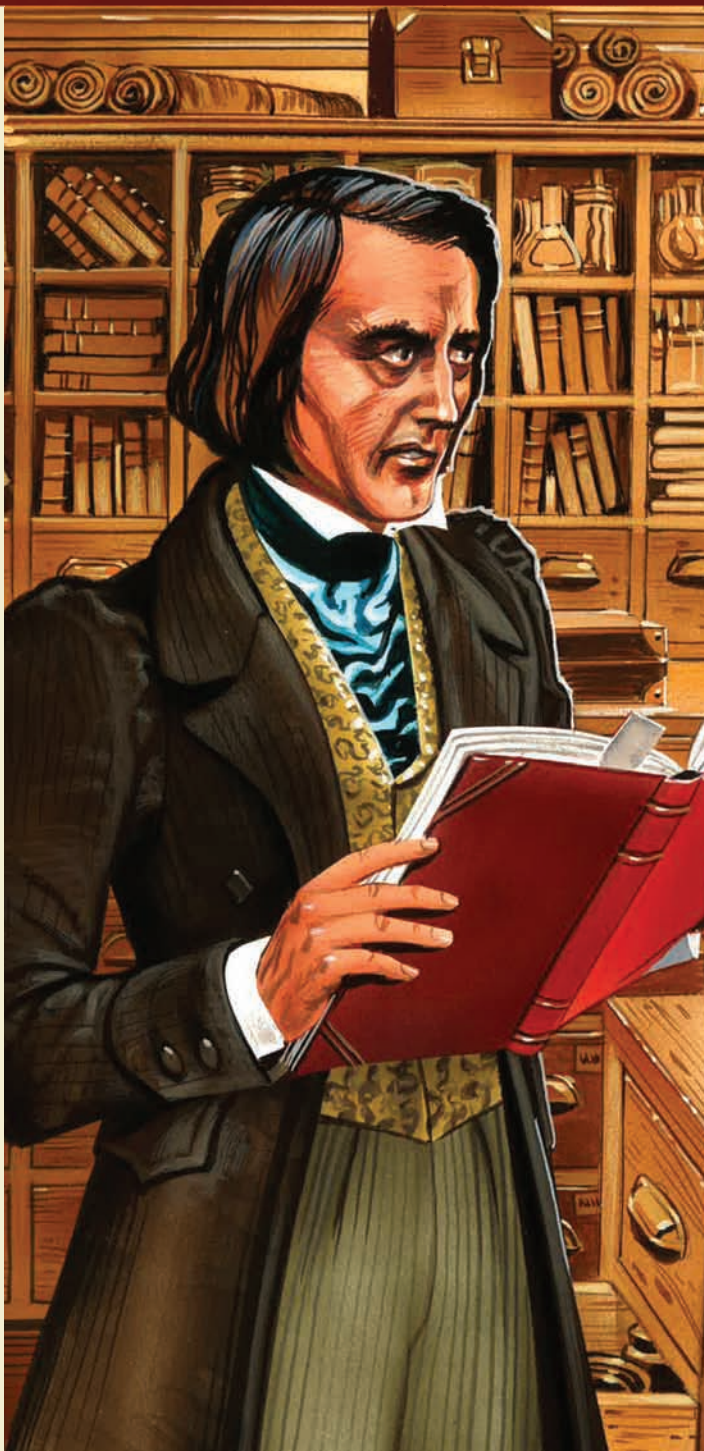
illustrations by Andrew Burdan

RICHARD OWEN'S

by Quinn Berentson

It all began when a man appeared in the doorway of Professor Richard Owen's laboratory. The visitor was carrying a mysterious piece of bone, and he was determined to show it to the professor. The date was 18 October 1839. The place was London, England.

Richard Owen was famous for three things: he was the world expert on the remains of exotic animals, he was very bad tempered, and he sometimes claimed other people's work as his own. Maybe it wasn't such a good idea to interrupt him, but the visitor - whose name was John Rule - did it anyway. After all, he had come a long way ... all the way from Sydney, Australia. John Rule's piece of bone, wrapped in tatty brown paper, had come even farther. It had been found on the East Coast of the North Island of New Zealand, and it came with an amazing story ...



GIANT MYSTERY



AN AMAZING STORY

Before Professor Owen could complain about the interruption, John Rule begged him to listen to his story. It went like this: John Rule had a nephew in New Zealand named John Harris. He was the first European trader to live on the East Coast. Local Māori had given Harris the bone, saying it was very special and had come from a giant bird. Harris then gave it to his uncle John Rule in Sydney, and now Rule had sailed halfway round the world to show it to the professor.

WASTE OF TIME

Richard Owen took a quick glance at the bone and told John Rule that he had wasted his time. It was far too big and thick to have come from a bird. The bone was clearly the middle section of a thigh bone, with both ends snapped off. In Owen's opinion, the **femur** had belonged to a cow.

It seemed that John Rule had come a long way for nothing. But he wasn't about to give up so easily. He knew a thing or two about animal **anatomy** himself. Rule pointed out something he thought was significant. The inside of the bone looked like a honeycomb. There is only one kind of animal that has bones like this: a bird. Cow bones, like those of other mammals, are hollow and filled with **marrow**.

John Rule was right, and Richard Owen knew it. Despite its large size, the mystery bone *did* look like it was from a bird. The professor was interested. How could he not be? He told John Rule that he would study it more closely.

LIKE NO OTHER ANIMAL

Remember that this was only 1839. Richard Owen had none of the technology that scientists have today. He had no computers, scanners, or cameras – and he certainly didn't have the Internet on which to look things up. Owen had no idea what **DNA** was either. There was only one thing that he could do to identify the mystery bone: compare it with other bones.

This cross-section of a bird bone shows the honeycomb structure that is unique to birds.



Luckily, the professor was in charge of the biggest bone collection in the world – the famous Hunterian Collection. The collection filled an entire museum and contained the bones of thousands of animals from all over the planet. That night, Owen stayed up late. First he compared John Rule’s bone with the bones from farm animals in New Zealand. Then he looked at stranger, more exotic bones. These belonged to mammals from Africa, Asia, and Australia. But the bone didn’t match any of them. Whatever creature it had belonged to, it was like no other animal on Earth.



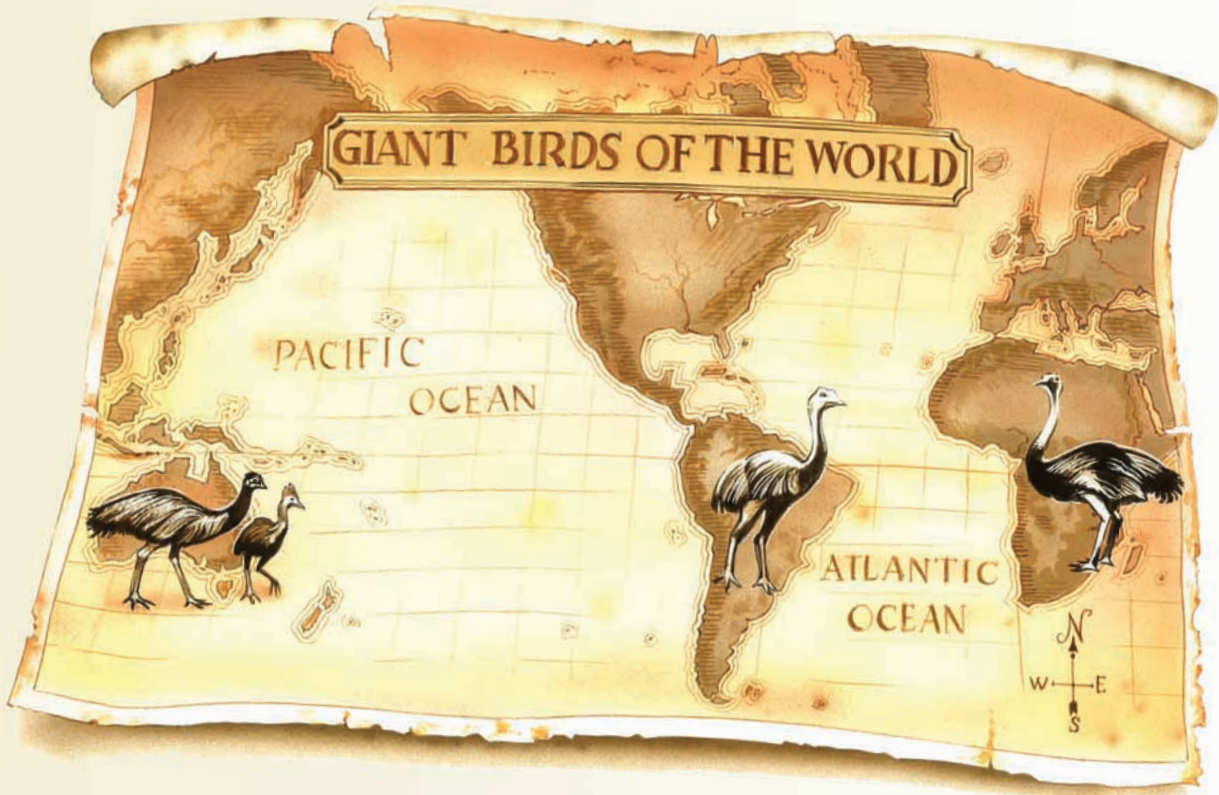
Finally, after hours of work, Owen had a breakthrough. As he was rechecking the collection's African section, he saw that the mystery bone looked similar to the leg bone of an ostrich – only it was much bigger. The more Owen compared the two bones, the more convinced he became that John Rule, his nephew John Harris, and East Coast Māori were right. Some kind of gigantic bird *had* once lived in New Zealand. And it was now the biggest bird ever known to science.

NOT IMPRESSED

Richard Owen was eager to share this amazing discovery. The next week, he took the bone to a meeting of the Royal Zoological Society. These were the most important animal scientists in England. But they were not impressed. The biggest bird in the *world*? Really? Where was the professor's evidence ... because as far as they were concerned, this one piece of broken bone wasn't it. The scientists had other questions too.



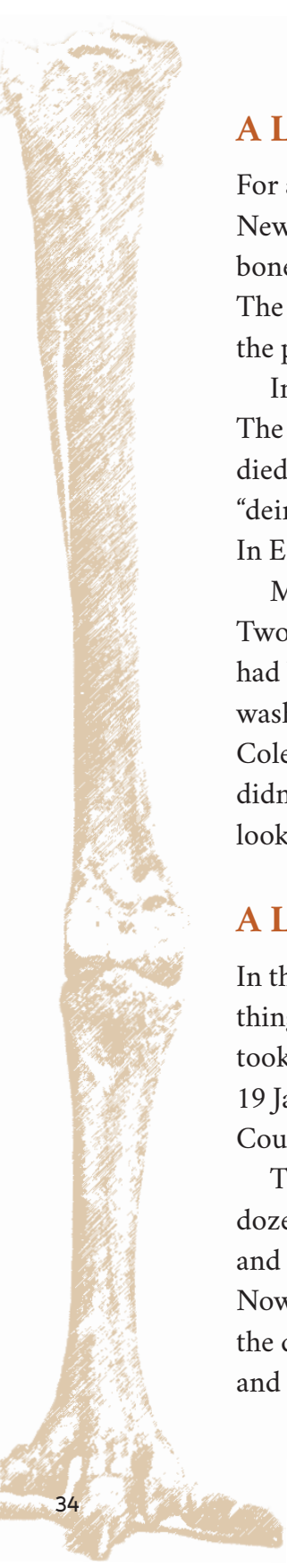
By the end of 1839, Richard Owen had already published an article about his giant-bird theory in a scientific magazine. These drawings of the piece of bone from John Rule were published alongside the article.



If the world's biggest bird lived in New Zealand, surely more people would know about it. Many Europeans had visited the islands since Captain Cook in 1769. Some of them had been scientists, and they had studied the country's unique native animals, most of which were birds. They had also talked to Māori, who were experts on every living bird in the land. Visitors had heard stories about taniwha and monsters of the forest. But they'd never been told about giant birds.

There was another thing. How could such a huge animal end up in such an isolated place? Why would it only be on a few islands in the South Pacific? All the other large flightless birds lived on continents. The ostrich lived across all of Africa. The rhea roamed South America, and Australia was home to the emu and the cassowary. None of these birds could fly or swim, so how could a similar species make it all the way to New Zealand?

Richard Owen couldn't prove his theory. And because the bone was only a piece of whatever creature it had belonged to, he wasn't allowed to give it an official name. All Owen could do was hope that someone, somewhere, would find more evidence of this mystery giant.



A LONG WAIT

For almost four years, Richard Owen heard nothing from New Zealand. But he was kept busy. People had been finding the bones of huge **prehistoric** creatures in quarries all over England. The bones were many shapes and sizes, but after much careful study, the professor said they belonged to the same group of animals.

In April 1842, Richard Owen made a major announcement: The ancient bones belonged to giant reptiles that had lived and died out millions of years ago. Owen combined the Greek words “deinos” and “sauros” to give the reptiles their scientific name. In English, it meant “fearsome lizard”. We know them as dinosaurs.

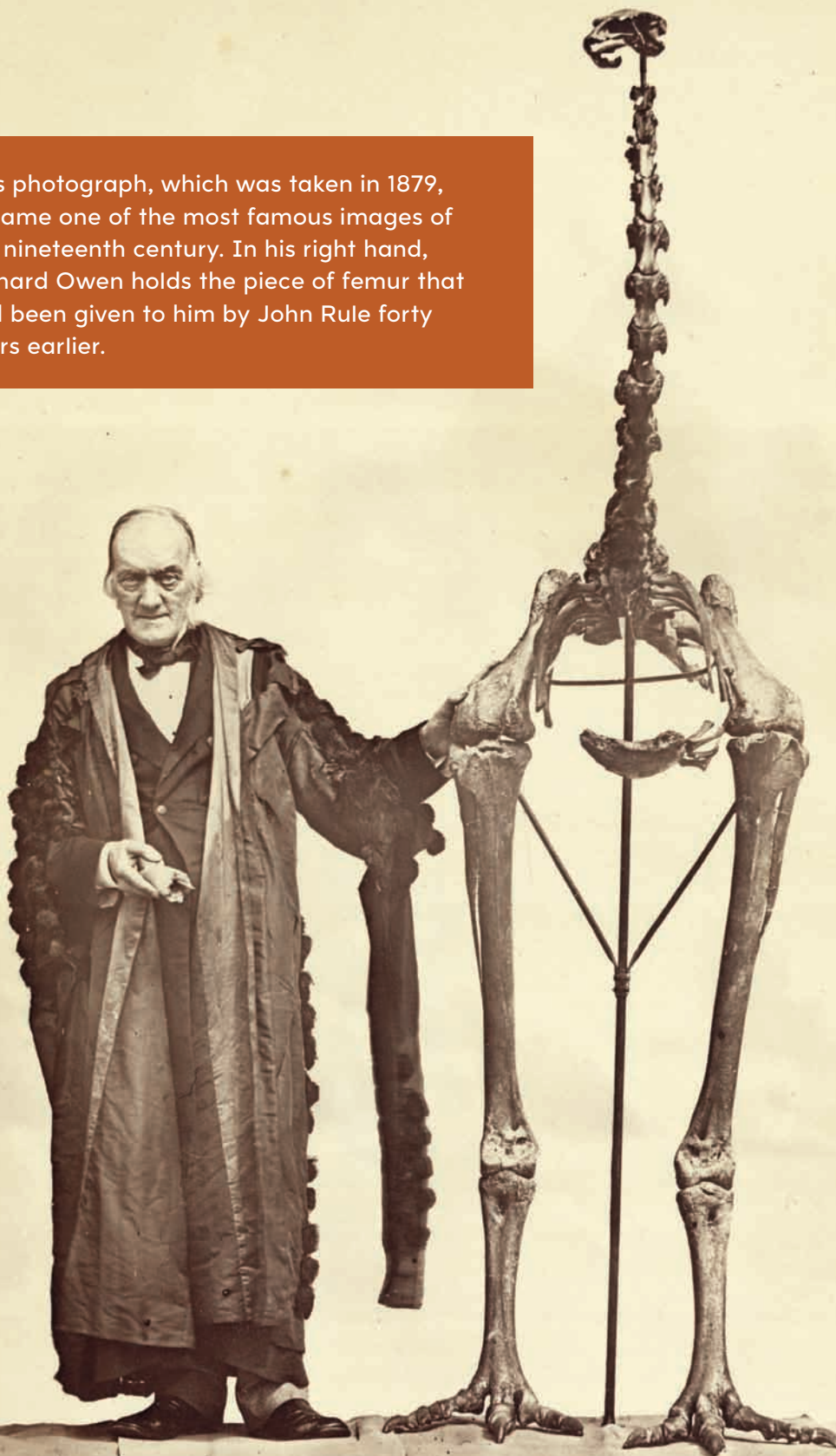
Meanwhile, there had been a development back in New Zealand. Two English **missionaries**, William Colenso and William Williams, had been given a collection of large bones. The bones had been washed from riverbanks after a flood and found by East Coast Māori. Colenso and Williams knew about Richard Owen – although they didn’t know about his giant-bird theory. They thought the bones looked important, and they decided to send them to the professor.

A LONG JOURNEY

In the 1800s, New Zealand was an isolated place. The only way to get things across the world was by sailing ship. This dangerous journey took three months. The bone collection finally arrived in England on 19 January 1843. Owen had been expecting it, and he was nervous. Could this be the evidence that proved him right?

The professor opened the boxes and was amazed. There were dozens of bones. Some were huge – a metre long. Others were whole and in perfect condition. This was everything Owen could ask for! Now no one could doubt the giant bird of New Zealand. Very soon, the discovery was huge news. People all over Europe read about it, and Richard Owen became even more famous.

This photograph, which was taken in 1879, became one of the most famous images of the nineteenth century. In his right hand, Richard Owen holds the piece of femur that had been given to him by John Rule forty years earlier.





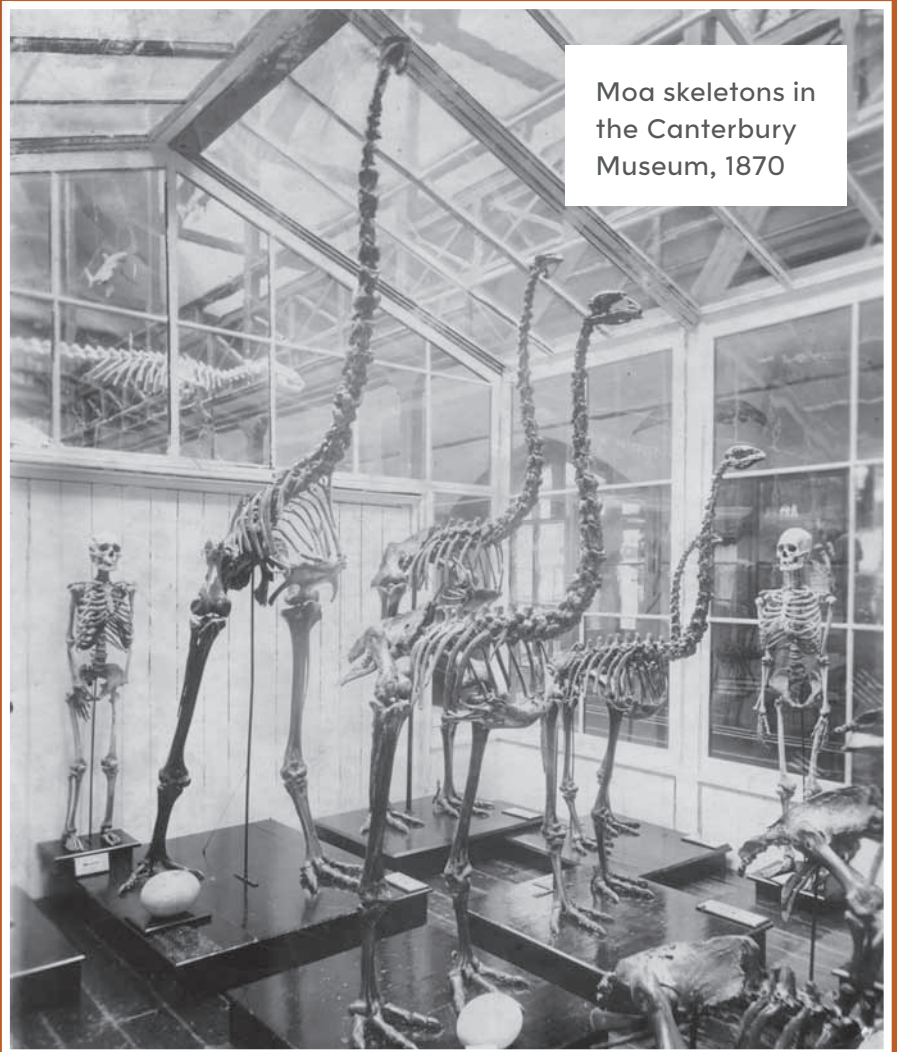
A GREAT SCIENTIST

Despite Richard Owen's first thoughts about the bone all those years ago, he kept an open mind and he persisted. These were two qualities that made him a great scientist. Owen used scientific observation and then patiently waited for enough evidence to prove his theory: New Zealand *was* once home to the largest bird ever known.

Now that he had evidence, Owen could finally give the giant bird its scientific name. He again chose "deinos" and combined it with the Greek "ornis" meaning "bird". Owen also used the Latin "novaezealandiae", referring to where the bird had once lived. *Dinornis novaezealandiae* – the "fearsome bird of New Zealand" – was now official.

We're still amazed by this giant creature that once shared our home, although few people know its scientific name. Of course Māori knew the bird well and had named it centuries earlier. It's the name we still use today: the moa.





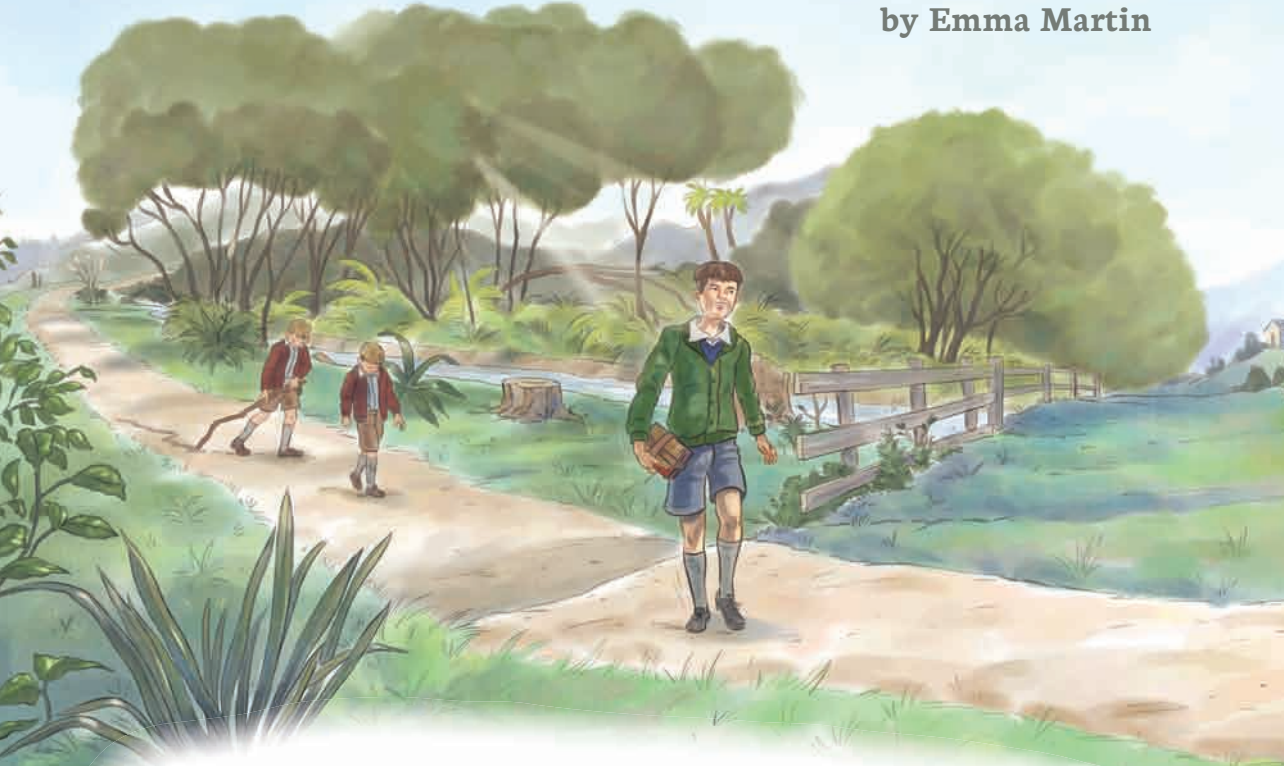
Moa skeletons in the Canterbury Museum, 1870

GLOSSARY

- anatomy:** body structure
- DNA:** (short for deoxyribonucleic acid) the genetic information inside cells that determines how a living thing will look and function
- femur:** a thigh bone
- marrow:** the soft, fatty substance inside a bone
- missionary:** a person who travels to spread their religious beliefs
- prehistoric:** very long ago, before history was written down

The Leather Satchel

by Emma Martin



Mary was walking through the gully to school, wishing she didn't have to go. Her brothers followed behind, waving sticks to ward off the magpies hiding in the trees. If you weren't careful, they'd swoop down and dive-bomb your head. Squinting in the winter sun, Mary thought she could see one. There, where the leaves were thickest, a flurry of black and white, the blink of a red eye. The bird disappeared back into the shadows, but she knew it was there. Watching. Waiting.

Gladys was a little way ahead. Her leather satchel bumped against her hip as she walked. Mary wished she could have a satchel. But there were five children in their family and only one satchel. Gladys got it for the same reason she got everything – because she was the eldest.

“Hurry up, slow coaches,” Gladys called over her shoulder.

Gladys hated being late. She was the best pupil in the whole school – everyone said so. She was so clever she was going to be a teacher. The magpies wouldn't dare dive-bomb Gladys. Sometimes Mary wished they would.



At the school gate, they separated. Mary spotted Betty and ran to join her as the bell clanged. In class, Mr Saunders was even crankier than usual. He had a cold. Every few minutes, he took a gigantic hanky from his pocket and gave his nose a ferocious blow.

“He sounds like a goose,” Mary whispered to Betty. “Honk, honk!”

Betty giggled, and Mr Saunders looked up. Mary dipped her pen in the ink pot and tried to look busy. But Mr Saunders wasn’t fooled. He walked across the classroom and reached for Mary’s exercise book. The ink had bled where she had written her name. It looked like a sausage dog walking on its hind legs.

Mr Saunders held the book up between his thumb and forefinger, the way you’d hold something slimy or smelly. “A monkey could write more neatly than this,” he said, and everyone laughed. Mr Saunders put the book back on Mary’s desk and sniffed. “It’s a pity you don’t take after your sister.”

Mary came home from school feeling cranky herself. Gladys took her satchel of books and disappeared to do her homework. The boys ran outside. Mary found her mother doing some mending.

“What’s that?” she asked.

“It’s a dress for Gladys. Aunt Lil dropped it off. It belonged to her neighbour’s daughter. If I fix this seam, it’ll be fine.”

Mary picked the dress up. It was pale yellow with sprigs of flowers. The flowers had probably once been red but were now a dusky pink.

“Can I have it?” she asked.

“You’ll get it when Gladys grows out of it,” her mother said, taking the dress back.

“It’s not fair,” said Mary. “Why can’t I have it now?”

“You know very well why,” her mother said sharply.

Mary did. Gladys was the eldest. By the time the dress was passed down to Mary, the flowers would have faded away. But she could tell by her mother’s face that she should hold her tongue.

To get back in her mother’s good books, Mary peeled the potatoes for dinner. It didn’t take long because there weren’t many. She tried her best to take off the thinnest layer of peel, then she chopped the potatoes into cubes and plopped them into the pot of stew that bubbled on the coal range. At least, her mother said it was stew. It looked more like soup to Mary.

Gladys came in while she was stirring. “I can do that if you want,” she said. But Mary just scowled at her.



That night, Mary's father was late home. He sat down at the dinner table, looking wearier than ever. He used to be a bookbinder but had lost his job the previous winter. He said it was because of the Depression. No one wanted to buy books when they barely had enough money for food. Now he dug rock from the hills. He came home covered in dust, even his eyelashes. Sometimes at night, Mary heard him trying to cough that dust up from his lungs.

They had just started eating when there was a knock at the door. Aunt Lil let herself in. Her face was so red she looked as if she might burst. She couldn't wait to tell them. There was a job going at the Grimshaws'. They wanted a hard-working girl to clean and cook for them. "I came here as fast as I could," Aunt Lil said. "If Gladys is there at six o'clock tomorrow morning, the job's hers."

Gladys dropped her fork on her plate with a terrible clatter, making Mary jump. Everyone stared at Aunt Lil.



“Mine?” cried Gladys. “But I can’t go to work. I’ve got school.” She turned to her parents. “Mother? Father? Tell her!”

Mary’s parents looked at each other but didn’t say anything.

Gladys stood up and ran from the room. They all heard the bedroom door slam.

Surely their parents wouldn’t make Gladys leave school, thought Mary. If she did, she would never be a teacher! Mary remembered how she and Gladys used to play in the shed in their garden. She hadn’t thought about that for years. They had called it their schoolroom. They had an old-fashioned slate and a cloth to clean it. Gladys taught Mary to write her name on that slate. Mary remembered how patient she was, how she had a way of helping that didn’t make you feel stupid.

After dinner, Mary dried the dishes while her mother washed. Clouds must have been gathering in the night sky because as she watched, the stars slowly disappeared. “Gladys won’t really have to go to the Grimshaws’, will she?” Mary finally asked.

Her mother was quiet for a moment. Then she sighed. “We need the money,” she said. “And Gladys is the eldest.”



When Mary went to their room, Gladys was already in bed. Her eyes were shut tight – perhaps too tight. Mary climbed into bed and pulled the blanket up under her chin. There was only a narrow gap between their beds. Usually that gap was a battleground of pointy elbows and kicking feet. But tonight there was an invisible wall between them. Gladys didn't make a sound, but Mary was sure she was awake.

Mary knew it wasn't Gladys's fault that she was good at school. It wasn't Gladys's fault that Mr Saunders was horrid. It wasn't Gladys's fault that the dress fitted her best. It certainly wasn't Gladys's fault that there was never enough money. Yet Gladys was the one who would have to pay. Mary thought of the magpie in the tree that morning – that sharp beak, those calculating eyes. Keep back, she wanted to tell it now. Stay away from my sister.

“Gladys?” she whispered.

But Gladys didn't reply. And when Mary woke the next morning, Gladys had gone, leaving her school books and leather satchel behind.

illustrations by Scott Pearson



Boost

by Eirlys Hunter

During the summer holidays before I started year 6, an ad for the new Boost Clinic began to flicker up everywhere:

You know you want it.
You know you do.
We have just the extension for you!



On the first day of school, Zaza Mackay pranced in with something white and fluffy curled around her waist. Her parents had bought her a tail! Zaza kept twitching it and stroking it. She was practically purring.

“A tail?” said my friend Hine. “Weird.”

“You’d think it would get in her way,” I said, “or make her sneeze.”

“I suppose it’ll be snuggly in winter,” said Hine.

It was like a game of dominoes. Next thing, Alice had a tail just like Zaza’s. Caleb’s was short and waggly, and Ramesh could hang from his like a possum. Lea got one like a horse’s tail. She even plaited it.

“Is this a classroom or a zoo?” Ms Clark wanted to know.



But that was just the beginning. During the next school holidays, the Boost Clinic ran a different campaign:

You know you want it.
You know you do.
Get a muscle boost
for a high-powered you!

In term two, Zaza could jump so high she got a netball through the hoop every time. Our coach made her goal attack instead of me. Soon most of our class made the trip back to the Boost Clinic. Alice's boost meant she could run super-fast, so she was promoted to play centre. Hine joined me on the reserves' bench, where we had to watch Zaza and Alice play in our bibs.

Term three was even worse:

You know you want it.
You know you do.
We'll make you into
a genius too!

Most kids chose a maths boost. "My dad always says if you want to be good at something, you just have to work hard," said Hine. "But *obviously* that's not true."

My parents told me to stick it out, that a new craze would come along sooner or later. That was easy for them to say – they didn't have to spend all day with Zaza and the boosted kids, who now wanted to study advanced calculus.

"We need different maths groups," complained Zaza. "Some people are holding us back ... not looking at anyone in particular." But Zaza was looking at people in particular. Hine glared back.

Ms Clark shook her head. "You can work through the curriculum like everyone else. No one gets special treatment when they take short cuts."

The boosted kids began referring to the rest of us as "the slugs". Then one day, Zaza called us "les limaces". Her mum had bought her a French boost. The following Monday, Caleb called us "babosas". Spanish. Soon they all spoke different languages.

"My parents don't care how much they spend on me. They're investing in my future," said Zaza.

"Don't you want to invest in my future?" I asked Mum that night.

"You can invest in your own future by doing your homework," she said.

I tried Nan for some sympathy. “I used to be clever,” I told her. “Good at maths, good at spelling. The best goal attack in the whole school. Now I’m a slug.”

“Show them you’re not. Learn something you can’t get boosting for,” said Nan.

“Like what?”

Nan opened a suitcase crammed with balls of wool in every colour. “I’ll show you how to knit a scarf. I’m pretty sure there’ll be no boost for that.”

I was pretty sure, too. In my head, I could already hear Zaza and the others laughing. Who would ever want a boost for knitting?

Nan handed me some knitting needles. “Come on, choose your favourite colour.”

I couldn’t hurt Nan’s feelings. Besides, I could just bury the scarf in my bottom drawer. No one would ever need to see it.

Knitting was hard. To begin with, I was very slow, and Nan had to keep rescuing all my dropped stitches.

But I got the hang of it. Very soon I could knit and talk at the same time, and I only had to look when I was joining two colours together. I had decided on a sunset scarf, the colours changing from sky-blue, to red, to orange, to flaming pink. Gradually the scarf grew until it was long enough to go around my neck with lots to spare.

“Very impressive,” said Nan. “I think slugs are my new favourite creature.”

I was so proud I wore my scarf to school.

“Wow!” said Alice. “Where did you get that? I want one, too!”

“Sorry,” I said, “but it’s unique. I made it – the only sunset scarf in the whole world, guaranteed.”

“Would your nan teach me?” asked Hine.

That was a good day, and it got even better when I learnt we were back in the netball team. The Sports Council had decided on a new rule: no boosting, and especially no tails. Bad luck Zaza and Alice.



Then it turned out that the genius stuff wore off after a few months unless you paid for re-boosting, which was even more expensive than just boosting. Alice said the boosting machine gave her a headache anyway and she wasn't going back, and the other kids agreed. Soon their advanced calculus and their French and their Spanish faded like a torch that needs new batteries. Zaza was very quiet and sat sulkily, stroking her tail. Who knew how that might end up?

"I'm glad all this nonsense is over," said Ms Clark. "And to celebrate, I think our end-of-year party should have a theme: creativity. Everyone has to wear at least one thing they've made."

On the day of the party, Hine wore the beanie she'd knitted with Nan's help. Alice wore a skirt like a piupiu she'd made out of straws. Ramesh had made a cloak, and Caleb wore an amazing papier mâché warrior helmet.

I wore huge red and yellow wings. They were so good Ms Clark looked worried. "It's OK," I reassured her. "I made them out of paper and wire. I'm not going anywhere."

"They're absolutely beautiful," Ms Clark said. And she was right – they were.

illustrations by Thomas Hsieh



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