



LIFE
ON
MARS

TALES FROM THE NEW FRONTIER

AN ORIGINAL SCIENCE FICTION ANTHOLOGY

EDITED BY

JONATHAN STRAHAN



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*For my brother Stephen, again, with gratitude for his endless willingness to share his frontiers with
me.*

INTRODUCTION: LIFE ON MARS



Jonathan Strahan

Mars has traditionally been the setting for grand tales of romance and adventure: stories of powerful gods of war, beautiful maidens, and mysterious aliens. Tellingly, those tales have grown and changed with each passing year as what we know about the red planet has increased.

Our nearest planetary neighbor has had many names: the ancient Romans called it Mars, but it was known as Nergal by the Babylonians, Ares by the ancient Greeks, Mangala by the ancient Hindus, Ma'adim in Hebrew, Bahram by the ancient Persians, and Sakit by ancient Turks, while the Chinese, Japanese, Korean, and Vietnamese cultures referred to the planet as the fire star, a name based on the ancient Chinese mythological cycle.

Although Mars was known to many of Earth's ancient cultures, it is only in the past few centuries—since telescopes improved to the point where we could begin to make out its image clearly—that we have begun to learn much about it. The astronomers Giovanni Schiaparelli and Percival Lowell named Martian seas and continents in the late nineteenth century, creating a world that fired the imagination of H. G. Wells, who in *The War of the Worlds* described an ancient race casting envious eyes across the gulfs of space at our young and vibrant blue world. In *A Princess of Mars*, Edgar Rice Burroughs told of the swashbuckling adventures of a Virginian soldier on the sweeping plains of Barsoom, a savage frontier world filled with honor, noble sacrifice, and constant struggle, where martial prowess is paramount, and where strange Martian races fight over dwindling resources. Mars often appeared in early twentieth-century science fiction stories, providing either a threatening nemesis or an exotic locale for many, many classic tales.

Then, in 1964, the United States launched the space probe Mariner 4, followed by Mariner 9 in 1971, as well as Soviet probes Mars 2 and Mars 3, and then most significantly Viking 1 and Viking 2 in 1976. They sent back images that swept away any grand visions of a romantic world filled with ancient civilizations, replacing them with photographs of what may be the largest mountain in our solar system—so tall it reaches through the atmosphere into space itself!—the longest, deepest valleys, and many other awe-inspiring sights.

Wonder after wonder . . . but no sign of life.

Our knowledge of the planet changed permanently, and this changed the kind of stories we told. Instead of stirring adventures with four-armed green giants fighting shoulder to shoulder with heroes on dead seabeds, we were treated to tales of shattered, isolated expeditions traversing cold, distant deserts, or epic visions of vast engineering projects to make Mars more Earthlike, with Mars turning

first blue as its oceans filled and then green as its forests grew. But, alas, all of those tales were merely dreams.

Or were they?

In early 2004 the president of the United States, George W. Bush, announced that they would send astronauts to the moon by 2020, establish a permanent base on the surface of the moon—and then turn its attention to Mars, with a goal of putting people on the planet. NASA now estimates it can send a manned mission to Mars by 2037. It was a grand vision, and one that looks like it could come true, if not quite as we might have anticipated. In 2001 the Mars Odyssey orbiter was launched, and remains in orbit as I write. It was followed by further probes—the European Space Agency’s Mars Express Orbiter, the Spirit and Opportunity probes and then the Mars Reconnaissance Orbiter—all of which added more and more to our knowledge of the planet. The European Space Agency announced that it too intended to put humans on Mars, sometime between 2030 and 2035. There’s even a Google Mars

And yet nothing’s assured. Political plans change. There’s no way of knowing exactly when, or if, humans will land on Mars.

Whatever human exploration of Mars turns out to be like, though, we can be sure it won’t be easy or safe. Half the size of Earth, Mars has almost no atmosphere, and what little it has is constantly being stripped away by the solar wind. Relentlessly bombarded by radiation, its gravity is about a third of Earth’s, and it receives only half the amount of light we’re used to, and . . .

. . . and yet it’s Mars! Another world! Modern dreams of Mars are dreams of a cold, hostile place initially made bearable and then possibly made wonderful. In response to former President Bush’s bold and optimistic presidential decree, I challenged some of science fiction’s finest writers to imagine stories set in a world where the mission was a success, and humanity gained a permanent foothold on a new world. Some set their tales on the journey, some soon after colonization, and others in a far, far distant future. The tales that follow are very different from the kind of stories that were being written about Mars one hundred years ago, but they are still filled with stirring adventure and grand romance. I hope you enjoy them as much as I have.

Jonathan Strahan

Perth, Australia



ATTLEE AND THE LONG WALK



Kage Baker

It was close and foul in the shed as the kids packed in, giggling. Attlee wrinkled her nose. Some of the stink came from the sacks of chemical fertilizer being used as seats, and some of it was the goaty sweat of children, but most of it was the ever-present methane fug of the Long Acres.

“Ayck-oh!” said Stot Richards, ducking inside and pulling the door to. “All clear, Supreme Council.” The Supreme Council of the Martian Shadowcats was presently only Hobby Augustus and Jennifer Langshank, since Eddie Penton had started working grown-up hours and attending Collective meetings. Jennifer would probably follow soon, since she had begun to grow interested in boys and was getting a little impatient with the rules and regs of the Shadowcats. Attlee figured that Hobby would stay until she dropped, though, because Hobby loved being in charge.

You could see it in the way she held up her hands now for silence, like she was an Ephesian Mother from the mission up the hill, and in the way she pursed her lips in disapproval when Dinky Purett farted and everyone around him started laughing.

“This is not a laughing matter,” said Hobby. “This is a deadly serious matter! So you just listen up, brother and sister Shadowcats. Because you won’t be laughing when it’s *your* turn, I can tell you.”

The snickering died down. Hobby leaned forward and lowered her voice dramatically.

“This is the story as we heard it from Blackie Atkins, who heard it from Sharn Penny, who heard it from Pollitt Gardiner, who heard it from Bill Haversham who is dead and gone and killed in the Strawberry cyclone. They say. But some people say that the Old Roach got him, just for knowing that he was there and letting on. So you think about that as you listen. The Old Roach might be listening too.

“It was long years ago, when our mums and dads and our granddads and grandmams first formed the Collective and came up here to Mars. And there was a lazy sod came along among them and he was a Backslider. And in his crate of personal stuff some cockroaches stowed away, and the frozen cold of space didn’t get them, and they didn’t starve neither on the trip. And when the Backslider opened his crate, the cockroaches all ran out and ran away down the Tubes. And everybody thought they’d die, on account of they were Earth bugs.

“But no!

“The black night frozenness didn’t kill them: they changed their blood so they were full of antifreeze. The Ultraviolet didn’t kill them: their scritch armor got hard and thick and kept it out. The Outside didn’t kill them, either: they learned how to breathe without any air out there. And when they’d been little chippy things on Earth, up here they grew big and strong; big as your hand, big as dinner plates. And they laid their eggs everywhere and ate the insulation off wires and started fires.

“So it was War. And the brave heroes of the Collective gave every kid a hammer, and said, ‘It’s your duty to hunt and kill these enemies of the people, and that ought to be enough for you, but if you’re really good at it you’ll earn threepence for each one you kill.’ So that was when the Bug Hunting started. The kids killed hundreds and thousands of cockroaches, and the smashed corpses was ground up into fertilizer, in aid of making the new perfect world. And so it goes on to this very day.

“But!

“There was one cockroach we didn’t get. One cockroach that was bigger and faster and smarter and meaner than the rest. And he kept growing! Rays from space made him extra big. He got smart enough to pick up commcodes on his long, long antennas, so he listened like a spy to everything the Collective done, and waved his whippy antennas in the air and picked up signals from the shuttles coming in, and from the capitalists up on the mountain, and he learned human ways. There’s even talk he learned to steal clothes, disguise himself as a man, and sneak up the Tubes at night to gamble and drink on Mons Olympus. But that’s just talk.

“Because everybody knows that what he done was, he hid himself far out, way out, at the farthest, farthest ends of the Long Acres. Four times four kilometers and then some. Way out there where there’s nothing but algae bubbling in the canals. That’s where the Old Roach hides, and he only come creeping back at night when we’re all asleep in our beds. He knows how to steal from the fields. When you go out in the morning to feed your rabbits, and the screen’s torn and maybe a rabbit or two is gone—well, it was the Old Roach done it.”

There was dead silence in the shed as the younger kids listened open-mouthed. Leo Grindell looked as though he was about to cry. Hobby surveyed them triumphantly. She leaned forward and continued

“And, ever since there’s been Shadowcats, we Shadowcats have had one test, and only one test, for admission to the Supreme Council. And what it is is, any kid that comes of age has to go out to the very end of the Long Acres, all by themselves. All the way. They have to brave the Old Roach. Then they have to come back alive. Not everybody comes back alive. When my cousin Shree was on the Supreme Council, there was one kid who went out and didn’t come home again. And when the mums and dads went looking for him, *all they found was his bones.*”

That did it for Leo Grindell, who started to bawl. He was only two (in Collective years; the people who lived up on Mons Olympus still measured time in Earth years and would have said he was four), so nobody laughed at him, but some of the older kids looked good and scared. Hobby turned slowly, pointing with her finger, and Attlee braced herself.

“And now it’s *your* time, Attlee Bonser!”

“I ’n’t scared,” said Attlee defiantly, standing up. She had turned six a month ago and been

expecting this. She folded her arms and stared Hobby in the eye.

“Well, you will be,” said Hobby. “~~Being a smarty-pants won’t help you when you have to go all alone into the farthest, farthest fields. When you’re huddling all by yourself in the dark and cold, waiting to hear the Old Roach coming along down the canalside—skitter skitter skitter! What’ll you do then?~~”

“Expect I’ll do as well as you did,” Attlee retorted. She hated it when people made fun of her for being smart.

“Yeah, well. We’ll see.” Hobby stood up and folded her arms too. She wasn’t quite as tall as Attlee in that crowd of stringbean youth, so neither Attlee nor anybody else there was as impressed as they might have been. “Tonight after Lights Out. At Besant Fields. Be there.”

Attlee trudged home to the allotment shelter where she had lived with her mum since her dad had been killed. It was smaller than the place they’d lived in before, of course; as the Council had said, there was no reason to waste a good shelter on just two people when a family could make better use of it. Attlee’s mum had sighed and nodded in agreement, too weary with grief to argue about it. Later—in private, to Attlee, on the understanding that Attlee would never ever tell anyone—she had laughed sadly and remarked that neither the old place nor the new would have done for a garden shed back on Earth anyway. Attlee had just shrugged. She’d never seen Earth.

Now, she stepped in through the lock and unmasked. Before sitting down with her lesson plan, Attlee knelt in the kitchen space and rummaged through the locker where they’d stashed her dad’s things. His psuit was in there; so was the billy-can he’d used to take out with him to the fields. The heating element was broken in the billy, and the psuit had some damaged sensors so it didn’t work very well (otherwise both would have gone back into the Collective’s store of goods), but Attlee was good at fixing things.

It took only a little tinkering to fix the billy, swapping out the element from an old hand-warmer. The psuit took a bit more work. In addition to repairing what she could of its broken connections, Attlee had to mend the couple of long gashes where her dad’s mates had tried to cut him out of the psuit when they still thought they could save his life. But what was duct tape for? She’d finished the job and stowed both the psuit and the billy together with some ration packets and a canteen in her pack, and got dinner on besides, by the time her mum came home from work.

They ate dinner in near silence, seated side-by-side on the fold-down, taking turns dipping into the casserole with their spoons. Nobody wasted resources on individual plates in the Collective.

“Done your lessons?” said Attlee’s mum at last.

Attlee nodded. “I finished extraordinarily fast.”

Attlee’s mum winced at the big word. “Don’t brag, girl.”

“Sorry.” Attlee looked sidelong at her mum. “Hobby and Jennifer asked me to a sleepover tonight. Ayck-oh if I go?”

“Thought you didn’t like them,” said her mum in surprise, turning to stare at Attlee.

“We made up,” said Attlee.

“That’s nice,” said Attlee’s mum.

“Might sleep over two days.”

“Having a party, are they?”

“Working on lesson plan project.”

“Oh. Well, that’s nice too.”

They scraped up the corner crust with their spoons, savoring it. "How's Uncle Dave?" Attlee inquired.

"Busy," her mum replied.

Busy went without saying in the Collective, but in this case it meant that Attlee's mum wasn't like to be seeing Uncle Dave for walks along the Tube anytime soon. Uncle Dave wasn't an uncle really; he had just been friends with Attlee's mum before she'd married Attlee's dad. Uncle Dave was kind and besides was a boffin in a white coat, doing science stuff. Boffins earned perks within the Collective because they worked with their brains. Uncle Dave had told Attlee that she had a good mix too. Attlee thought that if her mum married Uncle Dave, life would get a lot nicer for all three of them. Attlee had loved her dad, but he was gone. Attlee was a realist.

Attlee put the dish and the two spoons in the sink and carefully measured water to soak them, while her mum stretched out on the bed and opened a buke. She was absorbed in watching her holos by the time Attlee shouldered her pack, masked up, and crept out.

The little bluish sun had set and the temperature was dropping fast out in the black night out there beyond the vizio roof. Shivering, Attlee found a storage shed and ducked into it long enough to strip down to her thermals and pull on the psuit. It was too big, of course, but a few loops of duct tape (no Martian ever went anywhere without a roll of duct tape) around the wrists and ankles snugged it close. If it bulked awkwardly under her outer clothes, Attlee didn't care. Even with half its sensors broken, it still kept her deliciously warm.

The wind had picked up Outside and was howling, hissing sand against the vizio by the time Attlee got to the lock by Besant Fields. Hobby and Jennifer were huddled together in the red light of the warning lamp. As Attlee drew near, Jennifer reached up and turned her speaker on.

"You took your time," she complained.

"I'm here, 'n't I?"

"All arranged with your mum?" demanded Hobby. Attlee nodded. "All right, then. You go in there and you go *all the way to the end*. You may not even get there before morning. *If* you get to the end you need to look for a rock that's got SHADOWCATS scratched on it. You need to take it and put this in its place." Hobby drew a big flattish chip of stone from her pocket and thrust it at Attlee. Attlee took it and glanced at it briefly. It was marked s-c.

"Then, *if* you make it back you have to bring it straight to the secret shed," Hobby said.

"You lot waiting here for me?" Attlee shoved the stone into her pocket.

"As if!" cried Jennifer. "We done our test, thank you very much. I'm not standing out here freezing all night."

"So you both went all the way out there and had it out with the Old Roach, huh?" Attlee looked hard at Hobby.

"Of course we did!"

"How big is he?"

"I couldn't see him very well," said Jennifer, after a moment's hesitation.

"Big as a tractor," said Hobby. "But I can't say anything else. That would be telling."

"Right," said Attlee, putting as much scorn as she knew how into her voice. "Ayck-oh. Step aside, then."

They moved and Attlee palmed the lockpad and stepped through as it irised aside. Then it had shut behind her and she was alone in the dark, staring down the long passage into Besant Fields.

The canal ran down the passage's center, from the place just in front of her where the pipes fed it, to the far vanishing point in the darkness. The moistness in the air was rich, heavy, like perfume. Attlee

lifted her mask cautiously, then slid it off her face. She gulped in a breath. She could taste the oxygen in the water droplets. It was just the sort of lush pleasure the kids of the Collective were taught to distrust. *That's sensual, that is. Bad for you.* As if to underscore the admonition, something flickered with movement far ahead.

Nothing really there, Attlee told herself. Nothing to be scared of anyway. Except Mars. And Mars is scary enough.

Every Martian kid knew that there had once been a time when ancient Mars had been like ancient Earth, a little blue planet with water and an atmosphere, but something had smashed Mars into—what had the book said?—into its own Permian Extinction that never ended. Only algae had survived, down in the frozen water. But just as Earth had healed itself of its Permian catastrophe, Mars might be healed too, and that was why everybody had to work selflessly at the Great Work of giving him back an atmosphere and freeing his water to fill his vanished seas. . . .

Attlee stepped forward, clenching her fists on the straps of her pack. Nothing jumped out at her, and so she took another step, and another, and after that she just put her head down and kept walking.

At Besant Fields the domed area widened out, with rows of beets on one side of the canal and rows of cabbage on the other. Attlee paused here and looked around suspiciously. Though the wind howled outside beyond the vizio transparency, though it moaned and spattered the walls with blown sand, no breath of air moved in here. The beets and cabbage were as immobile as though they were painted on the walls. Only the water moved, flowing down the canal, throwing little glints of green around the walls where a safety light reflected off its surface. Had that been what she'd seen?

Of course it had been. Must have been. Attlee marched on along the service path next to the canal, resolutely ignoring all the sneaking memories that came creeping to mind now. Hadn't it been Besant Fields that had been hit by the first-ever Strawberry the Collective had faced, a long time ago when they were newly arrived on the planet? The cyclone of pink sand and red boulders roaring up out of the west was very rare here on the Tharsis Bulge, but came paying a special visit to the Collective to test its resolve. It had destroyed the temple the Ephesians had built, it had picked up another building and whirled it like a hat until it landed on a ledge far up Mons Olympus, and it had ripped through Besant Fields.

Don't think about that. Useless memories make you weak.

But it was hard not to remember the whispers passed among the adults when they thought children were asleep: *It tore away the vizio like it was cobwebs. The cabbages froze and dried in an instant, they looked like green glass and shattered to bits if you kicked them. The boulders came smashing down and bashed the canals so the water froze and blew away as frost; you can still see the places where the concrete was replaced. And we hadn't learned yet to wear psuits, see? There was only one man, Alf Higgins, who had traded for one. And he was wearing it, and he was one of the five who was in Besant Fields when it happened.*

He saw it all and lived to tell it. Saw the others, heroes of the Collective all, picked up and whirled away like straws. They all hung on to the vizio frames but one by one their hands froze and they lost hold, all except Alf. The gloves of his psuit kept his hands from freezing. But whether they were scoured to death or froze or were smashed by rocks going 'round and 'round, all of them died, see? Except Alf. Which is why we always wear psuits in the fields now.

And we went out weeping and found the heroes' bodies, one by one, with their clothes shredded away and the black blood frozen in their mouths, and those four red polished stones mark where we buried them, and those are the graves of the heroes of Mars. They're shrines, that's what they are, to the first who gave their lives in the great work of making this planet the perfect world.

Attlee hated that story. It was a lot of talk to give you the shivers, the same way Hobby was always talking to impress the kids. Making up things. The Strawberry had been real enough, that was even in their history lesson plans and you could still see the foundations where the Ephesian Temple had stood. The other bits, though . . . people becoming heroes with shrines just because they were in an accident and got killed . . . that was stupid.

It wasn't like they had wanted to die. It wasn't like their deaths had done any good. Attlee's dad hadn't wanted to die either, when the tractor fell down the dune and onto him, but there had been the same kind of talk at his funeral. Fat lot of good a fancy tombstone did anybody.

Attlee shrugged and quickened her pace now, reaching the lock into Besant Annex. It was loud here where the canal dove into pipes that took it underground and up again into the Annex. She palmed the lockpad and went through hastily.

Besant Annex ran on for kilometers and kilometers, striking north. Someday, when the Collective had terraformed the whole planet, it would be only one of thousands of vizioed canals crossing the face of Mars, carrying water everywhere. For now it was the most that had been managed, a long, long tube of air over cultivated soil, with the canal running down its center like an artery. If the Collective had a good year there might be enough money to drill more wells, extend the annex. *Someday it'll be too long for the Shadowcats to send kids walkabout like this. Wonder what we'll do then?*

Attlee walked for hours, going through lock after lock. To her left, beyond the vizio, Mons Olympus blotted out the stars. Before her, rows of cabbage gave way at last to potatoes, and then gradually to barley. The smell of the air changed too; just as wet, but not so heavy with fertilizer. Attlee didn't know what sort of smell it was. She was wondering about it, half in a dream as she paced along, when the cockroach darted out at her.

It had scuttled up her leg and was making straight for her face before she coordinated herself enough to beat it off, smacking it away into the vizio wall in a frenzy of disgust. Acting on a lifetime of habit, Attlee had her mask down and had pulled a hammer from her belt in one smooth motion. She watched the roach, which lay immobile where it had fallen. It was a big one, maybe the size of a rabbit. A faint hiss and a warning pulse on the safety light told Attlee there was a puncture in the vizio, probably from one of the roach's spurred legs. She took her eyes off the roach for a split second just long enough to glance at the light. When she glanced back the roach had flipped itself over and was coming at her again.

Attlee leaped into the air and stamped on it, but the roach whistled in fury and pushed back under her boot, refusing to be crushed. It took several blows with her hammer before she was sure she'd killed it. The spiked legs kept flailing, slowly now. Attlee turned, gasping for breath, looking to see if any others were lurking about. Seeing none—and Attlee knew how to spot the curve of a shiny carapace, the involuntary twitch of an antenna—she put away her hammer and dug out her roll of duct tape. The vizio puncture was easy to find by the needle-jet of burning cold it was admitting. Attlee patched it and stepped back into the comparative warmth of the potato field.

She eyed the dead roach distrustfully. *You're not so big*, she thought. *Are you the Old Roach? No wonder the likes of Hobby and Jennifer saw you and lived to tell the tale.*

Looking ahead, though, Attlee saw that Besant Annex stretched on a long way yet, curving slightly as it veered northwest, its vizio panels glittering faintly in the starlight. Closer to she saw that some of the potato plants were dying, pulled up, their roots all gnawed through and tubers dug out of the sand. Had one roach done all that?

Wary, hammer in hand, Attlee searched along the rows for any other insects, but nothing attacked her. It wasn't until she got to the end of that section of the canal that she saw the black hole in the

ground, right by the conduit pipes. After a long staring moment of incomprehension, she realized what it must be. Snarling in disgust, Attlee scuffed sand into it to close it, stamped hard to collapse it.

Bloody roaches!

She jumped through the lock into the next length of the annex, holding her hammer high. Nothing but the peaceful trickle of water along the canal, seeping under its layer of algae, and the boom and sigh of the wind Outside. Silvering barley stood tall and motionless along both lengths of the fields. Anything might be hiding back in there. Anything might come rushing out at knee level.

So that's it, thought Attlee. It 'n't one big old roach, it's a bunch of regular ones, only biggish, and they've learned to dig the ground. And they hide in the day, when the grown-ups come out here, so that's why only Shadowcats ever see them, here at night.

And that would be why those stories might be true, about some kid that went missing and all they found was his gnawed bones out here. Some kid who maybe pushed his mask up, same as Attlee had, so he could smell all the sweet wet air, but he maybe hadn't had the sense to pull it back into place. And maybe he'd got tired and lay down for a sleep. With his face and hands uncovered, and no psuit like Attlee had, and then the roaches came.

Attlee shuddered. Something bright yellow was flashing in her field of vision; one of the working sensors in her psuit was telling her that her heart was beating fast. She clenched her fists.

"Listen! You don't understand me, because you're stupid roaches. But any of you takes me on, I'll kill you, see?"

Nothing answered her. Blown sand gusted against the vizio. She raised her hammer in the darkness, gripping it tight. "Shadowcats rule OK!" she cried, and immediately felt silly. Oddly, it diminished her fear.

She began to run along the canal footpath, jogging steadily, counting her strides as she went. Each stride was a meter; five hundred meters brought her to another lock; five hundred more took her down the next bit of canal and all the way to the next lock.

All this, she thought, just so I can join the Supreme Council. Had she ever actually wanted to join the Supreme Council? What was so great about sitting in on private meetings with Hobby and Jennifer? It was the first time Attlee had ever thought about it objectively. Then again, thinking objectively wasn't really encouraged, was it?

You got born and your parents dropped you off at the Collective's baby-minders, so they could work while you got fed your pabulum. As soon as you were old enough you got put to work doing bal stuff for the Collective, feeding rabbits and chickens or cutting air filters out of paper—anything a little kid could do—so you'd learn to be a good worker. As you got stronger you were given your roach hammer and set to harder jobs, learning to repair tractors or pick cotton. Until you were fifteen Earth years old, though, the work day ended at two in the afternoon.

It was supposed to give kids a chance to play, before settling down with their lesson plans; a chance to have some "unstructured time" so they could just be kids. The only problem was, most kids in the Collective didn't know what to make of unstructured time. They wandered listlessly in the Tubes, uneasy without someone shoving chores at them. And so the Shadowcats had been founded.

Bill Haversham had started them. He had been born on old Earth and he had said a cat was a kind of animal you didn't eat, but people had used to keep them because they hunted rats, which were like roaches only not bugs. So the Shadowcats were the great roach hunters, the kids who were best with their hammers, fast and brave and smart.

That had been the idea, at least. Shadowcats were supposed to band together and have exciting adventures stalking and killing roaches. Sometimes that happened, it was true, but mostly they held

meetings that were just like little Collective meetings, where everyone sat around and listened to Council members talk on and on. But at least it was something to do, until you turned eight—sixteen in Earth years—and went to work full-time.

Attlee had begun to suspect that she'd be bored by the Shadowcats long before she came of age. She wasn't sure they didn't bore her now, actually.

But what'll I do with the next two years if I drop out of the Shadowcats?

She thought about it as she pounded grimly along. She liked books. Attlee was good at her lesson plans. Everyone said she was smart, though they usually said it with a slight sneer, as though cleverness was something to be ashamed of. Uncle Dave didn't, though. What if she had the brains to be a boffin? Wear a white coat like Uncle Dave, get a nicer place to live, work with clean hands in the Collective's laboratory instead of grubbing in the fields like her dad and mum? You weren't suppose to be ashamed of grubwork, because it was honest labor and a noble sacrifice that would transform the planet. Attlee wasn't ashamed of it, but she didn't fancy being crushed to death in a stupid accident because Earth tractors didn't work well in Martian gravity, or for some other fool reason.

Wrong to think that way. That's practically criminal. Selfish. You don't get to have a future; the future belongs to everybody. Somebody has to work in the fields. Your mum and dad did. Think you're too good for that? Pride'll be your downfall.

But some kids were smart enough to become interns, and learn to work alongside the boffins. If she spent more time on her lesson plans, took some extra courses instead of hanging out with the Shadowcats, would Attlee qualify to become an intern?

Is that why you want Mum to marry Uncle Dave? So you can get a soft job?

No! Attlee wanted her mum to marry so she'd be alive again, instead of the dead-eyed low-priority field mule she'd been since Attlee's dad had died. Rise up in the dark and spend your days cutting irrigation trenches in the clay with a shovel, and come home worn out and only too glad to do nothing but watch old holos until you fell asleep, every night for the rest of your life until you died, when you got called a hero. Her mum had used to laugh sometimes. Now she never even smiled.

And it was obvious that Uncle Dave cared about Attlee's mum, the way he looked at her, the way he'd asked her out to walk in the Tubes, the way he'd invited them over to his shelter and cooked the dinner. Boffins got allotted a lot of good food. But Attlee's mum seemed content to disappear inside cocoon of apathy and exhaustion, as though her life was already over and there was no point hoping for anything new.

Still, if Attlee worked with Uncle Dave, that would make reasons for Attlee's mum seeing him more often, wouldn't it? And then she'd have to come back to life. She could be proud of Attlee being smart, instead of apologetic. She'd have a reason for taking an interest in things.

Attlee Bonser, Backslider.

She wasn't a Backslider! Wanting a better life wasn't the same as if she planned on ditching the Collective, the way some traitors had done, and going to live up on Mons Olympus with the rich people or, worse, going back to Earth. Attlee would stay on Mars and use her brains to make the terraforming go faster. She'd be a hero too. Just not a dead one.

But the jeering voice in her mind wouldn't shut up, and finally she stopped arguing with it as she loped along through the darkness. She was a long way out now, and though Mons Olympus still obscured stars to the west, different stars whirled and burned to the east; the others had long since sunk behind the jagged ridges of Ceraunius.

When she felt her strength flagging, Attlee stopped and pulled off her pack. She set up the billy-can, filled it with water, and dumped in a packet of dehydrated broth and noodles before activating the

heating element. The pounding of her heart took a while to slow down, as did her gasping breath, but they did, and so it was fairly quiet when she heard the scuttling run of another roach.

Attlee looked up in time to see it streaking straight for the billy, a big bold roach. Rising from her crouch, she grabbed the billy and set it high on the edge of the canal. The roach halted for a second. She was pulling out her hammer when it darted right up the side of the canal. Outraged, Attlee kicked at it to knock it off, but it dropped before she connected and her boot hit the canal wall with a painful thud. She chased it down the canal path, slamming at it repeatedly with her hammer, until she killed it at last. Limping, she turned and went back. She drank the broth and ate the noodles standing, dipping them out with two fingers as she glared around, daring anything else to surprise her.

Nothing more did. As she packed up the billy, Attlee spotted another couple of holes in the ground at the far edge of the field. The beets all around looked chewed and plundered. Muttering to herself, she stamped in the holes and continued her journey.

During her rest, the cold had begun to sink in a little, even through her psuit. Attlee could see the frost patterns on the vizio now, and here and there as she jogged along, the vibration of her passage knocked little flakes of ice from the ceiling or walls.

Got to be somewhere close now. Nobody's ever frozen to death going to see the Old Roach, at least. Attlee halted in her tracks as she heard a low gurgling roar in the darkness, echoing along the canal. She fumbled for her hammer and gripped it, half-crouched as she waited.

The roar grew louder, but as it did Attlee realized that it was coming from the fields behind her, rather than ahead. *He's back of me! How? How'm I getting past him to get home again?*

Attlee trembled as she waited, swinging her hammer to brace her nerves. *Big as a tractor, Hobby said. Can't be true. Just big. Jump high, hit hard. Don't let him knock you down—*

She saw the wave of steam racing along the pipe before she understood what it was. When she realized that the roar was coming with the steam, Attlee almost dropped her hammer, she was so relieved. She laughed out loud as the noise and the heat caught up with her and passed her, racing mindlessly on down the canal.

“Big as a tractor!” she cried. “You liar, Hobby!”

As clouds of warmth rose from the heating pipe, the ice on the vizio melted and began to fall in little drops, plinking into the canal and splattering on the path. The crops in this particular bit of the annex—oats, still green—seemed to wake up, seemed to crane eagerly toward the falling water. *They must be remembering rain,* thought Attlee in wonder. She slid her mask up and turned her face toward the ceiling. A big drop hit her cheek. *Is this what it feels like?*

She'd never seen rain. Rain was the blessing of old Earth, it fell from the sky everywhere down there. On Attlee's planet, water had to be melted and pumped from below, every drop, or brought in by Haulers from the poles. Mars had no blessings; every good thing here had to be earned. *But someday will rain.*

Feeling light-headed from the moist warmth, Attlee trudged on. More often, now, she saw the black mouths of dug burrows, always in fields that looked neglected and chewed. The crops out at this distance were all stuff that didn't need to be tended much, oats and barley and sugar beets, and the burrows looked fresh. Attlee supposed they had all been dug since the last time the planting crews had been out here. Dutifully she stamped in each one, as a Shadowcat ought to do, but there were more and more of them now.

What if the Old Roach laid eggs and they hatched, and these are his kids? He's a she then. Attlee thought briefly of an Old Roach dressing itself up like one of the posh ladies on holos, disguising itself with makeup, drawing red lips around its mouthparts and simpering. Somehow that made it

scarier. And what if thousands of giant roaches were down this end of the fields, now, with Attlee wa out here all alone?

She began to run again, not too fast, determined to keep control. *I'll do it. I'll fetch back their stupid rock, just to show I wasn't scared, and then I'll ditch the Shadowcats. I don't need the likes of Hobby and Jennifer always telling me what to do. Jennifer's going to leave soon anyway and that'll just make Hobby bossier. I'll go to Uncle Dave and tell him I want to be an intern and ask him what classes I have to take.*

The sneering voice in her head called her a coward, called her lazy, told her she wasn't worthy to clean the canal-mud off the boots of the noble field workers, and asked moreover what would happen to the Great Work if everyone tried to get themselves soft jobs?

Attlee came to the next lock, smacked it, and jumped through. There, far off but clearly visible, was the far wall with no lock, the end of the annex. And that was dawn light filtering in, over a wretched ragged field of sugar beets so chewed up the field looked already harvested.

If the Old Roach is anywhere, Attlee thought, it's here.

She was suddenly acutely aware of how tired she was, and what a long way she had to go to get home. She thought of Hobby's scary stories, all the kids nodding solemnly and believing every word. You were *supposed* to believe, weren't you? Believe and shut up and do what everybody else did. No question the ones like Hobby, who liked to boss everyone around. Not *know* things by finding them out for yourself.

But it's good to know things.

Attlee took the stone from her pocket with one hand as she walked forward and swung her hammer in the other. All around her, black things were springing out of the ruined field and streaking for . . . streaking for the biggest den Attlee had seen yet, a mass of holes and thrown-off dirt.

There's dozens of them. Not one big one, but lots. One slip and they'd be on you in a second, biting and hooking you with their spikes. So this was it, this was the real danger you had to face. This was the truth behind the stories.

Attlee walked straight and steady, keeping to the canal path. She got all the way to the end and looked out at the vizio wall. The sun must be coming up, far away on the other side of the eastern hills. She could just glimpse frost glittering on the Ceraunius tops, though stars were still visible. Lowering her gaze, she saw the rock marked SHADOWCATS lying in front of her boots.

Attlee bent, dropped the rock she was carrying, and scooped up the one she had come so far to find. As she was putting it in her pocket, she saw something beginning to emerge from one of the holes.

Shuddering, she ran and stamped at it with her boot, as hard as she could. The soil gave way under her and she fell.

Attlee didn't fall far. But it was pitch-black where she landed, somewhere warm and stinking of . . . what was that smell? Her arm was buried but she thrashed free, smacked on her mask's light, and swung her hammer.

It didn't connect with anything. Attlee looked around wildly, expecting her light to flash across clicking mandibles, waving antennae. She saw none. There was only a glimpse of a pair of legs vanishing into a wall of holes . . . black-furred legs . . . and the wall was obscured by branching spindly stuff, whitish-yellowish. . . .

Attlee followed the branches with her spotlight, down to the floor where they sprouted from a dense carpet of pelley things, black and squashy.

She remembered being little and working at the baby-minders', working with the animals the Collective farmed because kids were supposed to like animals, only she never had liked cleaning out

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