

# Predatory Instinct

The background of the entire page is a vertical image. It features a dark, almost black, silhouetted foreground at the bottom. Above this, a bright, glowing horizon line curves diagonally from the bottom left towards the top right. The light from the horizon transitions from a deep orange and yellow near the ground to a clear, vibrant blue as it reaches the top of the frame. The overall effect is one of a dramatic, high-contrast scene, possibly a sunset or sunrise over a body of water or a distant shore.

A Short Story by  
Scott R. Parkin

The background of the entire page is a vertical image. It features a dark, silhouetted foreground at the bottom, which appears to be a landscape or a body of water. Above this, a bright, curved horizon line stretches across the frame, glowing with intense orange and yellow light, suggesting a sunset or sunrise. The sky above the horizon is a deep, clear blue.

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ArcPoint Media  
Santaquin, Utah  
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Book and cover design by Marny K. Parkin  
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# **Predatory Instinct**

## **a short story by Scott R. Parkin**

The lander skidded once, then plunged down, penetrating the outer atmosphere of the planet Ernte. The landers were little more than boxes on springs with minimal steering rockets and an abundance of heat shielding, and the tiny craft bucked and twisted in the turbulence. Mark Abrion kept his gaze fixed on the navigation panel in front of him, fighting the urge to call out orders as he had on over thirty other drops. This time that responsibility belonged to Sharon Huber.

“Navigation report,” Sharon said.

“Correction two degrees starboard.

Attitude clear. Speed clear.” Mark said.

“Correction two degrees starboard,” Ross repeated from the pilot’s seat as he made the adjustment.

There was no real need to call out corrections; automated systems could land within twenty meters of anything on a first drop, and within twenty centimeters once a marker was planted. But it was tradition under Mark’s command to go manual first time down to keep everyone alert, focused, and busy. He appreciated that Sharon kept the practice for her first drop.

“From here down, call out nav corrections on anything over oh-point-five degrees,” Sharon said, her voice clear and controlled, her words

confident.

“Yes, sir,” Mark said. He was tempted to add, “I know the drill; I’ve done this thirty times more than you have, dearest,” but he held his tongue. He hadn’t had time to talk with her in private about the situation, and he didn’t know how she felt.

Or more accurately, Mark still wasn’t sure how *he* felt. And he wasn’t sure he could say anything that wouldn’t sound critical. It was one thing to be replaced as drop leader after thirty trips, but it was something else altogether to be replaced by one’s close friend—perhaps more than friend.

So he kept his mouth shut and did his job. It was the only thing he could

do.

The lander jerked as it punched through the last resistance of the upper atmosphere, then sailed smoothly down into the clear blue sky of the Planetary Assessment Corporation's newest claim. They had named the planet "Ernte" after the German word for "harvest." The company thought using a non-English word somehow ennobled the planet, made it exciting and mysterious.

Besides, Germany was the second most powerful nation on Earth, and it never hurt the bottom line to kiss a little ass now and again.

Mark looked out the viewport and saw the wide expanse of verdant green below. Patches of rugged brown mottled the landscape where



mountains punched up through the dark carpet of life that spread before him until it curved away at the horizon. The flat, shimmering disk of a lake glinted at him like the winking of an enormous eye. Though the lander was too high to see individual features of this immense landscape, Mark could imagine it. It was a great green jungle, filled with the abundance of life only ever found before on one planet. Earth.

Air samples showed the atmosphere to be slightly richer in oxygen, with a lower methane content than Earth. Otherwise it was a flashback to the primordial Earth, with abundant vegetation and a massive diversity of life.

But long-range scans had shown no

organized radio, microwave, or magnetic emissions. Surface analysis detected no cities or roads, no boats or dams, no bridges or vehicles. On a planet as Earth-like as Ernte, the lack of civilization was eerie.

Mark felt a touch on his shoulder and looked up. Sharon stood looking out the window with him. She smiled. "Beautiful, isn't it? I almost feel bad that we're here to conquer it." She laughed, but the sound was sad. "In three years, you'll be able to see our presence from space."

Mark shrugged. "We have a job to do, that's all. There's no malice in it."

She rubbed his shoulder and leaned in close. "Are you okay with this? I need your support."

Mark stared at the nav console, but

didn't say anything. He liked Sharon and he wanted her to succeed. But not at his expense. He had spent a lot of time with her over the past few years—not all of it on company business—and he had learned to care for her a great deal. Perhaps more than was healthy for a good bachelor.

Mark noticed they were off course and called out, "Correction one-point-three degrees port. Repeat, one-point-three to port."

Sharon took her hand off his shoulder and moved back to the command console, her face grim. He hadn't meant to snub her; he wanted to talk, but not here in front of the pilot. Not now.

He tried to catch her eye, but she sat at the comm set with her back to him.

She punched in the code for secure tightbeam and hit the send switch. “This is landing group three, confirming safe entry. Do you copy?”

A voice came over the speaker. “This is central. We copy your safe entry. All four groups have reported clear. Groups two and four are confirmed landings. Markers successfully launched and grounded. We’ve planted the flag; it’s our planet now.”

“Glad to hear it. We are on schedule and according to plan. Group three out.”

Sharon dropped the headset on the command console and stood up. “I’ll be in the back going over the crew assignments.” She stepped back through the narrow doorway without looking up.

When she was gone, the pilot shook his head. “What’s wrong with you? Get your ass back there and take care of her.”

Mark looked at Ross. “What do you mean?”

The big man snorted. “No one here but us chickens, Mark. Everyone knows you two are together.” He nodded toward the doorway. “Why’d you ignore her? She was trying to talk.”

“I didn’t ignore her; I was just doing my job,” Mark said.

“Bull. You’re playing the hurt puppy because she’s drop leader instead of you. You’re better than that.”

Mark shook his head. “It’s not her. It’s just—” he sighed. “Everyone in this lander—including Sharon—was

under my lead until yesterday. It's hard to go from being the boss to being just another member of the crew."

"She's the best exobiologist in the company, and this is the first habitable planet we've found. This is what she was hired to do, Mark. You know that."

Mark sighed. "That doesn't make it any easier."

Ross laughed. "And you think it's easy for her? Didn't I just hear her ask you for help? She's not stupid, Mark. She knows she's a specialist; she wants you to do what you do best. Like you said, just do your job. That means helping however you can. Talk to her."

Mark nodded. "As soon as we land."

He looked out the window again. They were approaching the surface of the planet, and he began to see distinct shapes. Huge trees swayed in a gentle breeze, great green leaves flopping lazily from side to side. He could see the form of some huge animal grazing down and to his right. To see it from this height meant that the creature must be every bit as large as an elephant or mammoth. Mark craned his neck, but the thing passed under the lander, out of his view.

Mark grabbed the intercom. "ETA three minutes. Strap in."

Sharon stepped through the doorway and he reached out and touched her arm. "You're right; it is a beautiful planet."

She looked at him. "Does that make

a difference?"

He nodded. "All the difference in the world. I'm sorry."

She took his hand. "Are we okay?" He nodded and she smiled. "I'm glad. We need to talk."

"Yes, we do." He smacked her on the butt. "But right now you need to strap in for landing."

Mark looked out the viewport. The lander had continued to lose altitude, and now skimmed only a few hundred feet above the ground. He could see the large animals clearly now; they appeared to be huge lizards. Dinosaurs.

They passed over the glittering expanse of a lake, then came in for a landing. He had seen the long open field from his vantage point at the side



of the lander. It was a clearing in the dense growth of trees, a field of wild grass that shimmered with the breeze so that waves rushed across it like the surface of a deep green sea. It wasn't the perfect landing strip, but it would suffice.

They were about to land when Sharon shouted, "It's coming straight for us!" A split second later, the landing craft bucked and Mark lurched forward. The lander pitched and rolled, then struck the ground with a wrench of metal and glass. The craft rolled end over end, and finally came to a rest, tilted up on its side.

Mark struggled out of his shoulder strap. Sharon knelt next to Ross. He was still strapped into his seat, but flying debris had cut him above the

right eye and livid red blood flowed down his face and dripped off his chin, splattering his legs.

The pilot looked up. "Is everyone else okay? One of those dinosaurs came at us from the side and jumped up into the landing gear." He shook his head, and little drops of blood flipped off his chin. "Damnedest thing I've ever seen. Something as big and loud as this lander should have scared the thing off. But it charged right at me."

"Maybe it didn't know better than to attack," Sharon said. "This isn't Earth; these animals haven't learned to be afraid of us yet." Sharon tore open a gauze bandage and put it on the wound over his eye. "Hold this tight. I'm going to check on the others." She

stepped into the back of the ship.

Ross watched her go, then shook his head and whistled. "She is a looker, though, isn't she? I'll let her hold my bandages any time." He grinned at Mark.

They heard a scratching sound and a rodent scurried out from under the control panel and across the floor, its nose up in the air and its whiskers twitching. It was the size and shape of a rat, with dirty red-brown fur. Its tail was short and stubby, almost as if it had been clipped off, and its thin, pointed snout barely concealed sharp, oversized teeth.

The rat seemed to catch a scent and turned to face them, its glittering eyes yellow in the bright sunlight that filtered into the cabin. It gazed at

them for a moment then put its head down and made a beeline up Ross's leg and onto his chest. It dove for the wound over his eye and latched on with its needle-sharp teeth. Ross grabbed the rat and flung it away, but another rat scurried up his chest, then another. The two men picked off the rats as fast as they could but dozens, then hundreds of them flooded into the compartment. Each rat got a tiny bite, and in only a few seconds had turned the small cut over Ross's eye into a gaping wound. Screams from the back of the ship mixed with the pilot's shrieks, but nothing stopped the rush of animals that ripped and tore at his flesh.

Mark fell back against the surge of small bodies. Ross no longer defended

himself, and the rats now swarmed unhindered over his body. He caught glimpses of white and red and brown among the crush of small furry bodies, and after only a few moments, the rats began to dissipate, leaving only a litter of clean white bones behind.

Mark huddled in the corner, waiting for the rats to come after him, but they milled about, eventually making their way out of the lander by whatever way they had entered.

Mark staggered to the back of the ship. Two seats held only tatters of clothing and shining bones. The others stared up at him in shocked silence. Sharon shook her head. "It must have been the blood; they were both injured. That's the only difference." She looked up at him.

“Ross?”

“They went straight for the cut on his head.”

Sharon took a deep breath. “Right,” she said and stood up. “If the rats got in, there’s been a hull breach and we’ve lost containment. For better or worse, Ernte has been exposed to our germs, and we’ve been exposed to its.”

Mark shook himself. “We should go to environment suits immediately until I can make an initial evaluation. We need to reduce exposure as much as possible.”

Sharon nodded. “Everyone into suits now. Jim, establish a perimeter at thirty meters’ radius from here. Dave, evaluate the damage to the ship and seal the breaches. Mark, take Fitz and sterilize the area inside the perimeter

—get some of those rats while you're at it. When you're finished with the perimeter, help Jim set up the fence."

Mark nodded. She was doing exactly the right thing; get people working before shock set in. Keep them busy until the moment of panic is past and their wits are restored. That gives her time to evaluate the situation and plan accordingly.

He turned and set about his tasks. Sharon was doing just fine. Maybe even better than he would have.



Mark sighted on a distant rat and fired. Instantly, every rat within thirty feet rushed to the corpse, tearing at it, ripping it apart. In a moment the dead rat was gone, and the others resumed their wanderings, oblivious to the

frenzy of only a moment before.

“Incredible,” Fitz muttered. “A bunch of fuzzy land-based piranhas. They’re out of control.”

Mark nodded. “Let’s see what happens with a stench grenade.” He took a small, olive drab container out of the bag at his feet and slipped a thin vial into the middle, then pulled the pin and tossed it twenty meters ahead of them. After a moment a cloud of white smoke billowed into the air.

Mark raised his rifle, picked a rat wandering in the middle of the cloud and fired, then watched through the scope. The rats within a few feet swarmed over the corpse, but no rats came from outside the cloud of stink. The rats devoured the corpse in the



few moments before the cloud dissipated, and no rat more than two meters away even took notice.

Mark smiled. He had developed the stench grenade back on Earth. It was designed to mask any organic odor and had worked well in lab tests. But they had never had a good field test and certainly never with anything as scent-oriented as the rats of the planet Ernte.

The grenade worked perfectly.

Mark clapped Fitz on the back. "We have protection from the rats. At least until we can find a more effective method." He started back toward the lander. "Check the traps. We should have caught a few by now."

Fitz nodded. "Right," he said and took off. He moved two steps and

turned around. "Can I have a couple of those grenades? Just to make sure I'm safe."

Mark loaded two grenades and handed them over. "Be careful."

Fitz smiled. "Hey, this is me. Back in a minute."

Mark watched his friend go. Fitz was probably the most brilliant nanotechnologist alive, but he was something of a screw-up. His mind was usually way ahead of what his body was doing, and he often made a fumble of even the simplest physical task. Mark had no doubt Fitz would find a way to screw this up, but he needed to make Fitz feel like he was contributing.

Mark moved toward the lander. The campsite was starting to shape up. Jim

Azawa was nearly finished with the electrostatic fence, and the area inside the fence had been cleared with the best chemicals human technology had to offer. The rats had scattered easily, and Mark had set up ultrasonic emitters ten yards beyond the perimeter to keep them out until the fence was turned on.

They were nearly ready to begin the business of studying the mysteries of the planet Ernte.

Mark checked the instruments he had set up in the middle of the compound and nodded. There was nothing in the air or water that was of any health risk. Impossibly, Ernte was totally hospitable to human life. The place was perfect.

As long as one didn't consider the

rats. Or the suicidal dinosaurs.

Mark checked the readings one more time, then cracked the seal on his environment suit and pulled off the helmet. He took a deep breath and let it out in a long sigh. The scent of honeysuckle was in the air, and Mark could only shake his head in wonder at this strange planet.

He donned and sealed his helmet, then entered the outer chamber of the lander and hit the entry button. Pumps sucked away the natural atmosphere of Ernte and replaced it with the scoured atmosphere of Earth. After a moment the green light flashed and he entered the lander.

Sharon stood at the command console and Squatty lay on his back beneath it, poking around inside and

cursing. Sharon looked up.  
“Everything set?” she asked.

Mark nodded. “Fitz is out checking the traps. Otherwise, we’re set to go.”  
He put his helmet down.  
“Atmosphere tests proved negative. We can lose the suits if we want. I couldn’t find a single virulent strain in the air—not even a common cold. It’s totally clean.”

Sharon raised an eyebrow. “Are you ready to stake your life on it?”

Mark smiled. “Already have. There’s nothing out there that can hurt us. At least nothing microscopic.”

“Squatty’s checking the console. We lost communications in the crash. He’s still evaluating the repair and—”

Fitz’s voice screamed over the speaker. “Let me in! They’re all over

me; let me in!”

Mark turned around and hit the emergency entry button. The inner doors slammed shut and the outer doors opened. Mark looked through the viewport and saw Fitz standing there, a stench grenade in his hand spewing smoke. He held his other hand above his head, and Mark could see that the glove had been torn and blood dripped from his fingers. Rats jumped high into the air all around him, trying to get to the wound.

Mark hit the comm switch. “Fitz, drop the bomb. Do you hear me, throw the bomb outside and seal the breach in your suit.”

Fitz threw the grenade, then pulled the tab at his left wrist and stepped into the lock. Mark hit the close

button. After a few moments the inner door opened and Fitz stumbled in. Dead rats littered the floor inside the lock, their bodies bloated by the vacuum of the lock.

Fitz yanked his helmet off. "They're crazy!" He shouted, his chest heaving. "The traps are worthless; they killed themselves once they got inside. They bit themselves and the other rats came and ate them. They ripped the traps apart." He held up his injured hand. The glove had been torn apart, and the flesh of his hand was covered in small scratches. "I must have pulled the pin without knowing it. One of the grenades went off in my hand, and the rats went nuts. They were going to kill me."

Sharon released the seal on his suit's

arm and blood began to flow from dozens of cuts on his hand and wrist. She wrapped it in a clean cloth. “Can you feel your hand?” she asked.

“Hurts like a bitch,” Fitz hissed through clenched teeth.

“Good,” Sharon said. “That’s going to hurt for a couple of days, but you’re going to live.”

Fitz shook his head. “Let’s leave this place. Now.”



Mark tightened down the last nut on the metal stanchion and looked up at Jim Azawa. Mark gave a thumbs-up and stepped back. Azawa flipped a switch on the large green box at his feet.

Mark felt his skin crawl, felt the short hairs on his arms and face rise.



He waved at Azawa, then picked up a twig and reached forward. A loud crack presaged the arc of static electricity that leapt out and shocked Mark's hand, sending the stick flying.

Mark jerked back. "Damn!" he shouted and rubbed his hand. "That should take care of the little rat-bastards." He stepped over to Azawa. "There's no sign of damage from the landing?"

Azawa shook his head. "None at all. The fence came through without a scratch." He grinned. "Of course, these things were designed to take a little roughing up. Nothing as trivial as a rough landing or a few rats is gonna hurt this baby." He patted the green box lovingly. "We're safe as safe can be behind this—" His face went white

and he pointed over Mark's shoulder.

Mark turned around. At the edge of the tree line thirty yards away stood a dinosaur. It was one of the creatures they had seen from the air, with a massive head, a muscular body, and a long thick tail, looking like a dwarfish tyrannosaur. Its mouth hung open, revealing double rows of the differentiated and specialized teeth of an omnivore, not the sharp, ripping teeth of a carnivore. Its arms were long and developed and it had small, delicate hands with sharp nails—almost human hands—that appeared capable of complex manipulations. Its skin was a mottle of greens and yellows so that it blended in with the surrounding brush. It stood at the edge of the clearing and watched

them, unmoving. Mark stared at it for a moment then turned around. "It's a dinosaur," he said.

Azawa frowned. "And a damned big one at that."

Mark shrugged. "Same size and shape as the others. Of course you haven't actually seen one yet, have you?" Azawa shook his head. "Other than the one that knocked us out of the sky they seem to be quite timid. We just had the luck to come across the only brain-damaged one on the planet."

"Don't you think we should scare it away or something?"

"There isn't anything to be afraid of. Look at the teeth—its not a meat eater."

Azawa shook his head. "It's not a

*pure* meat eater, it can handle flesh if it wants to.” His hand moved across the fence’s green control box. “I just don’t want one of those things to stumble into the fence here—it wasn’t designed for anything that big.” He frowned. “You said it’s timid. So scare it away.”

“If you say so,” Mark said and picked up the pulse rifle from next to the control box. He aimed at the ground in front of the creature and fired. The shot hit the ground and sent up a puff of dirt and grass. The dinosaur started, then turned and disappeared into the trees.

Mark handed the rifle to Azawa. “There you go.” He patted the man on the cheek. “Stop worrying. They’re part of what we’re here to

investigate.”

Azawa smacked his hand away. “I’ll worry about anything I damn well please, thank you. As for studying those things, I’ll go to them; I don’t want them coming to me.”

Mark nodded. “Whatever you say. I’m a microbiologist; I have no idea how to deal with anything that big. I’m used to taking what I can get *whenever* it presents itself to me.” He turned back toward camp. “I’m going to see what Squatty’s learned.”

Azawa nodded and turned back to his fence. Mark headed to the lander. The front and top were crushed so the metal looked like a wrinkled blanket, and the right landing strut was bent up at a sharp angle.

Mark stepped up into the lander.

They had disabled the air lock and left the door open. Dave Waite lay on his back, his head lost in the tangle of wires and circuit boards under the console.

Mark coughed. "Squatty. How does it look? Can it be fixed?"

Waite slid out from under the console and sat up. "Everything can be fixed. The question is whether we can do it in time to meet the shuttle on the next pass."

Mark waited for Squatty to continue, but the stocky engineer just looked at him. "Okay, can we fix it in time?" Mark asked.

Squatty shrugged. "Can't say for sure. I can get the comm working in a few days. As for the rest . . ." he shook his head. "I think we can prep it for

take off, but I can't answer for the control we'll have."

"Elaborate." Mark said.

Squatty raised an eyebrow. "I'll get a report to Commander Huber when I'm finished with my evaluation."

At that, the engineer ducked back under the control panel and began to bang around. Mark turned and left the lander.

He and Squatty had a history of not getting along. And their relationship had only gotten worse when Mark started meeting Sharon outside of business over a year ago. He didn't know if Squatty had feelings for her and was jealous, or if he was just fiercely loyal to her and saw Mark as a threat to her new command. But it was clear that David Waite didn't like

Mark Abrion.

So long as that enmity didn't interfere with the business at hand, Mark didn't care.

He stepped over to where Fitz worked with Sharon to set up the latrine. Sharon stood in a three-foot ditch with a folding camp shovel in her hand. Mark laughed. "A billion dollars of tech in the lander, and we're digging latrine trenches by hand." He shook his head. "And you just standing there, Fitz. Where're your manners?"

Fitz frowned. "I can't work with this hand."

Mark clapped him on the shoulder. "That was a joke, Fitz. You know . . . humor?"

Fitz nodded. "Oh. I understand."



Mark smiled. "Glad to hear it." He turned to Sharon and helped her out of the trench. "Any word on how the repair effort is going?" he asked.

Sharon shook her head. "You'll have to ask Squatty about that; he's been in there all day trying to evaluate the task."

"Squatty told me he would give that information only to you. So I'm coming to you."

Sharon frowned. "I'll make it clear to him that you are to receive anything he has on any subject." She moved a step closer and lowered her voice. "How are you doing?"

Mark shrugged. "I'll live. Right now I just want to make sure that stays true." He looked back over his shoulder and nodded toward Azawa.

“We have the fence up. That should take care of the rats. Now all we need to worry about are the dinosaurs. I saw one earlier as Azawa and I were setting up the fence. It appeared to be watching us. I fired a warning shot and it ran off like a scared rabbit.” Mark laughed, but found that he couldn’t shake off the feeling of dread that had begun to eat at his thoughts. “Have you seen any of them?”

“Haven’t seen a one,” Sharon said. “Even stranger, though, is that we couldn’t find the one that knocked us out of the sky. We hit the thing hard enough to flip the lander head over heels, but the only thing we found out there was a hard, brown mound. Looked like a huge cow turd,” Sharon laughed. “But if that’s the turd, I

don't want to see the cow. It must have been thirty feet across. I got you a sample. It's on your cot."

Mark nodded. "I just hope the one we hit told its buddies to stay away from us before it died. If they get too curious we're in trouble; that fence isn't going to hold out anything that big." He sighed. "Are you ready to get a few rats? I know I'm curious."

Sharon nodded. "We've done all the setup we can do. I guess it's time to get to work." She hesitated. "Did you want to have a memorial service?"

Mark shook his head. "I don't think so. The best way to memorialize them is to do our jobs and get out of here."

Sharon nodded. "I agree." She looked over at Fitz. "Can you come with us?"

Fitz paled. "I'd rather not." He glanced down at his hand, then looked up. "But that doesn't really matter, does it? You've patched me up so well the rats can't smell me, so I guess I don't have any excuses."

Sharon smiled. "Good man. We'll head out in ten minutes."

Fitz nodded and headed back for the lander. Mark shook his head. "He's either brave or stupid. A good man looks at the whole situation and does the right thing, not the brave one."



"Stay under cover and be careful. Use your bombs now."

Mark tapped the acknowledge switch on the left side of his helmet and reached into his pack. He pulled

out a stench grenade and pulled the pin. The spoon dropped off and Mark counted to three before he tossed it into the dense green vegetation three meters behind him. Moments later a thick gray cloud blossomed up and Mark sucked in a deep breath of fresh air before the cloud engulfed him.

He held his breath as long as he could. When he did breathe the stench from the canister was so strong he could taste it.

Next to him, Fitz coughed. “Are you sure that stuff isn’t going to give me cancer of the gallstones or something? Can’t you do something about the stink?”

“Breath through your mouth,” Mark said.

Fitz coughed. “Yeah, but then I can

taste it; I'm not sure which is worse."

Sharon's voice was stern. "Priority transmission only. Put a lid on it until this thing is over." There was a long pause. "Try breathing through your mouth and chewing gum. It still tastes like shit, but at least it's spearmint-flavored shit."

Fitz laughed. "I'll take that under advisement. Switching to receive-only."

Mark toggled the receiver switch on his helmet, then cleared his throat and spit. He hoped the bombs would be enough to protect them. So far nothing short of isolation behind the fence had proven adequate protection against the rats. But that was not one of the options. They were here to gain knowledge, to wrest it from the planet

if necessary.

And they would have it.

Besides, until the shuttle came back and they could leave there was nothing else they could do. The shuttle's orbit would not bring it close enough to Ernte for a link-up for another week.

It was the only aspect of the planetary drop procedure that really bothered Mark; they were out of physical contact with both the shuttle and the *Valkyrie* for six more days. It was the only way to maximize speed for the larger craft—to let the massive transport slow down from its near light-speed velocity was to lose months in getting the hulk back up to speed. Months the company could not afford to lose. So their lives were ruled

by narrow windows of opportunity when they could dock first with the shuttle, then with the transport.

But they weren't docking with anything until they got the lander fixed. The shuttle passed close enough for a dock in six days, then was gone for another week. They could afford to miss the first pass, but to miss the second was not an option. If they missed the second pass, the shuttle would be unable to meet the *Valkyrie* at the docking point. Mark was certain that landing teams had been left before.

Mark popped a stick of Wrigley's spearmint in his mouth and chewed quickly. He looked across the clearing and gave a thumbs-up. Sharon's voice came over his helmet radio, "Now!



Get an animal and get out!”

Another cloud rose from the other side of the clearing as the second round of stench grenades went off. It was time to go.

Mark could hear the sounds of dozens of small animals scurrying through the dense foliage all around him, but despite the clear evidence of his ears, his eyes could not see a single creature. Not even a ripple in the grass marked their passage; only the sounds of scurrying feet moving toward him for a moment, then dissipating away behind him.

Mark glanced over at Fitz, who raised the thick plastic bag he was holding and nodded. Mark raised his weapon and sighted on a random spot in the clearing. His second shot hit a

rat.

Instantly, the dense underbrush seemed to boil with life. Mark secured his weapon, then tossed three more stench grenades in an arc behind them. When he was done, they stood in a circle of stink that masked the scent of his kill.

He looked over at Fitz, and saw him crouched over holding his bag open and scouring the brush. "Got one!" he shouted, tied off the end of his bag, and flung it over his shoulder. Mark could see the outlines of two animals fighting inside the bag.

Sharon's voice came on. "Take your animal and get back to camp. Don't open your bag until you're in the sealed area."

Fitz waved his hand. "Yeah, I know,

I know. Later guys.”

Mark tapped the comm. “It looks like you’ve got more than one, Fitz; there’s one hell of a fight going on in your bag.”

Fitz had already made his way toward the edge of the field, and now stood in the midst of the cloud that ringed the clearing. He took the bag off his shoulder and opened it. “You’re right. And they’ve really done a number on each other, too.” He turned the bag upside-down and shook the contents out onto the ground.

Sharon shouted over the comm. “Specialist Fitzwater, get back inside the safety zone. Move it! “

Fitz waved his hand and started back toward the middle of the

clearing. He had only made half a dozen steps when a shadow loomed up behind him and closed faster than would have seemed possible for something as large as it was.

Mark raised his weapon as Sharon shouted, "Fitz—hostile straight back. Drop left. Abrion—terminate hostile. Now!"

Fitz did a drop and roll to his left, then came up on his feet and ran straight ahead. It was a perfect training manual move that got him clear of the target, and Mark took aim at the hulking figure that stood behind him. Mark squeezed off two rounds at the enormous beast; one center chest and one center head. The creature hesitated for the briefest moment, then moved forward again

with its frightening speed.

Before Mark could fire again, the huge creature swung its arm and struck Fitz across the back with a clawed hand. Blood and tissue flew up and Fitz sprawled forward into the deep grass. Mark fired ten, twelve times at the huge form, but even as his weapon heated in his grip, Mark knew it was too late.

He felt the rush of small bodies scurrying through the brush, washing over his feet toward Fitz. "No!" Mark shouted and ran forward.

Sharon's voice boomed in his helmet. "Abrion, stand down. Mission aborted. Do you hear me? We have some animals; keep your distance!"

Mark moved to within twenty feet of the creature. At its feet a teeming

mass of rodents scratched and clawed to get their small piece of the kill, their small piece of Scott Fitzwater. He felt the bile rise in his throat as he fired off round after round into the seething mound of rats. But each shot only compounded the intensity of the frenzied mass as it turned and fed on itself. After a dozen shots, he stopped and lowered his weapon.

The huge creature stood by and watched Mark with a look that might have been clinical interest or bemusement. It towered above him at over twenty feet tall. It was a dwarfish tyrannosaur like the one he had seen that morning. Up close he could see that its body was compartmentalized, with deep fissures that outlined block-like sections. Mark noticed that

several blocks had been knocked out of this jigsaw tyrannosaur, including the foot section of one of its massive rear legs. It was crippled.

Mark raised his weapon and aimed at the creature's head, above the eyes. He fired, but the creature did not fall. In fact, his shot seemed to have had no effect at all; not even a spot or scar marked the point of impact. Mark fired again, then again, but his shots only raised a small welt where they reflected off its forehead. He checked his weapon and found that it was at full strength, delivering a 22 megawatt pulse. He aimed at the spot on the creature's forehead again, but this time it swung away, pivoting on its remaining foot. He had hurt it after all.

“Mark, get back!” Sharon shouted, but Mark ignored her. He didn’t know how the creature had lost the one foot—its smooth, polished skin made shots from his weapon all but useless—but he knew he could hurt it. After a few shots even the tough hide of its head had begun to scorch and swell.

And he couldn’t imagine any defense against the teeming rats that had swarmed over Fitz’s body and were now starting to disperse to their hidden lairs. He glanced at the spot where Fitz had fallen and found nothing but trampled grass and a few lingering rats. Not even bones.

Mark aimed at the creature’s remaining hind leg and fired. As he expected, his shot bounced harmlessly



away. He fired again and again, and a spot appeared, dark brown and dull against the polished green and yellow of its skin. The creature tried to pivot, but Mark turned with it and continued to fire at the spot. He would break its tough skin open and let the gargantuan lizard become food for the rats just as Fitz had been.

After a half-dozen shots, the skin of its haunch split open and Mark smiled. But before he could take any satisfaction, the wound putrefied and receded, and a thick brown liquid ran out of it. Within seconds, the whole section sloughed away, leaving the same kind of missing-puzzle-piece gap in this leg as he had seen on the other. Only a puddle of bubbling brown liquid remained of the

wounded section.

And the rats continued to mill about with no notice of the wound he had just inflicted on the towering lizard. “Notice this!” he shouted and fired on one of the few remaining rats.

Hands grabbed him from behind, and Mark let himself be dragged away. But he couldn’t take his eyes off the strange creature that stood silently and watched him go. It kept its indifferent gaze on him until he disappeared behind a cloud of stink.



“I say we just sit here inside the fence and wait for the shuttle to come around,” Azawa said, his face flushed. “Nothing else makes sense.”

Mark shook his head. “If the tyrannosaurs want to come get us,

they will. That fence isn't near powerful enough to deflect something that big if it really wants in."

Squatty raised an eyebrow. "And what do you suggest, oh imperious leader?"

Mark gazed at Squatty for a long moment, then took a deep a breath. "We can sit here and waste the biggest opportunity of our lives, or we can do what we came here for and learn something." Mark raised his own eyebrow. "Besides, Squatty, what's your gripe? You're staying behind the fence to work on the lander anyway." He smiled. "Any progress on that yet?"

Squatty cracked his knuckles. "The name is Dave—you don't get to call me Squatty." He looked over his

shoulder. "As for the lander . . . I'll get it fixed as soon as I can. I've already made my report to Sharon."

Mark looked up at Sharon. She nodded, a tired look on her face. "We should get communications functions by the day after tomorrow. The problem is not with the electronics—Squatty can put that together by cannibalizing other systems. It's the structural damage that's going to keep us on the ground." She looked up. "Is that right, Squatty?"

Waite nodded. "I can make her fly, but I can't make her fly straight. Our best bet is to get the comm up and have the shuttle drop us one of the extra landers."

"But that means we can't leave for another week," Azawa said. "I don't

want to stay here for an extra week.” Jim stood up and began to pace. “We must have hit that damned dinosaur fifty times and we didn’t even slow it down. If they come after us, we haven’t got a chance.”

Sharon nodded. “Squatty, what do you mean you can’t make the lander fly straight?”

“The entire directional array was crushed. I can clear the debris, but we’ve lost focus on the rockets. She’ll steer, but it’ll be sluggish at best. With the type of precision we need for a high-speed dock, it’s risky. Real risky.”

Mark nodded. “You’re right, Squa— Dave. The best answer is to call for the backup unit and wait it out. The tyrannosaurs haven’t attacked us here in the compound. Out there we were

invading its territory; they seem to recognize this as our area. As soon as you fix the comm, call for the backup.”

“Not your decision to make.” Squatty looked up at Sharon. “What’s the plan, boss?”

The lines deepened around Sharon’s mouth. “We’re here to do a job.” She faced Squatty. “We’ll do it the way Mark suggested.”

Squatty shrugged. “Seems to me that if some people would pay more attention to their own jobs and keep their nose out of mine, Fitz might still be here.”

Mark stood up. “And what is that supposed to mean?”

Squatty stared at him, his jaw set. “Nice job covering Fitz. What’d you

do, close your eyes?” Squatty snorted. “Of course he wasn’t one of yours. He was just the village idiot; what do you care?”

Mark stepped up to Squatty until he stood only inches away. His voice was quiet. “I hit that tyrannosaur two dozen times but it didn’t fall. I did my job!”

Mark turned away. He heard Squatty come up behind him and tried to turn, but the engineer tackled him and knocked him to the ground. Squatty shoved Mark’s face into the hard-packed dirt of the compound and Mark felt his lip split as it was crushed against his teeth. “You didn’t do your job well enough,” Waite said. “My friend is dead.” Then Squatty was gone.

Mark scrambled to his feet. Azawa held the squat engineer and Sharon stood in front of him. "Stop it. Now!" she shouted.

Squatty pulled free of Azawa's grip. "I don't have to take it from him anymore. I swear I'll kill him if he even touches me."

Mark pointed at Waite. "When we get back to the ship, I'll have you up on charges. Count on it."

"I bet you will." He spit on the ground at Mark's feet. "Take your shot. We're on equal ground, now; they busted you back to where you belong—nowhere."

"Is that the best you can do, Squatty? I'm disappointed. And you a communications specialist, too."

"Put a lid on it, gentlemen," Sharon



yelled. "Either one of you says or does anything else, and I'll bust you down so far you'll have to get permission to fart."

Everyone stood silent for a moment, then Mark smiled. "You still aren't very good at that, though you *are* getting better. Have you been practicing?"

The tension parted, and Sharon grinned. "Does that mean you want to fart? Permission granted." The grin disappeared. "I'm serious. I don't know what your problem is, but we don't have time for it. Deal with it on your own time, not mine." She turned to Squatty. "And you're out of line. Mark did everything he could. We had to drag him away."

Waite shrugged. "Yeah, right."

Sharon's voice was cold. "You've been on one since this trip started, Squatty, and I suggest you get an attitude fix." She walked over to the two cages that held the three rats they had captured in the raid that had cost Scott Fitzwater his life. "Right now we have two priorities—fix the lander and figure out how to protect ourselves from the tyrannosaurs." She looked up. "And that means everyone doing the job they're trained to do."

Squatty nodded and moved off toward the lander. Azawa approached the cages. He tapped the glass of the cage that held two rats and they cringed back and shivered in the far corner of the cage. "Damnedest things I've ever seen. They have no business being here; they don't fit in. Just like

those tyrannosaurs don't fit in."

"What do you mean?" Mark asked.

Azawa sighed. "I've only seen eight of the local animals, so it's a little early to start talking in generalizations, but these things don't make sense. Superficially, they're near-analogs of lemmings—*Synaptomys* or bog lemmings." He shook his head and stepped over to another table with another row of glass cages. "But look at this one," he said pointing at the cage on the left.

Mark bent down and peered through the glass. A dirty brown rodent curled up in the corner. Tiny yellow eyes stared at him from a long, narrow head. It looked a lot like a rat. But there was something wrong, the head was a little too long, the teeth a

little too flat. It had no whiskers to speak of, but that wasn't what bothered him. It was something else, something about the eyes . . .

Mark blinked and stood up. "It's eyes are in the front of its head. Aren't rodents' eyes on the side?"

Azawa nodded. "The ears and the paws are wrong, too, not to mention three pairs of legs." Azawa reached into the cage and prodded the animal, which rolled over onto its back and playfully grabbed at his hand. Six short limbs sprouted six big pink paws with wide flat fingers. The paws were thick and fleshy, the six fingers heavy and long with no visible claw. "Look at the ears," Azawa said.

He rolled the rodent over to its side, and Mark saw that it had tiny, fleshy

ears with almost human lobes. It was strange—at first glance it seemed like a normal, earth-type animal. But on closer examination, it was totally different in even the smallest, most apparently insignificant details. It was as if it had developed along an evolutionary pattern that was similar to, yet quite different from, Earth's.

Jim Azawa shook his head and waved at the row of cages. "Not one of these animals is designed to protect itself against a large predator. Small ones, yes. But not a big one."

"Not even the tyrannosaurs?" Mark asked.

"There's no need. It doesn't even seem to see them."

Mark stepped back to the first table and the two cages that sat on it. Now

that he looked, it was obvious that the rats—lemmings Azawa had called them—were very different from the other animals.

Azawa stepped to his side, holding the six-legged rat. “You know how they went after Troy and Chris in the lander, and Fitz out in the field because they were injured? Well look at this.”

He held the rat by the scruff of the neck. In his other hand he held a surgical knife, its fine blade poised over the rat’s belly. He gave quick, upward slice with the blade and opened a thin cut across its nearly hairless chest. The rat squealed and struggled as orange-red blood oozed up out of the wound. Azawa waited until the blood began to roll down the

rat's belly, then dropped it into the cage with the two others. They sniffed at the rat, then looked around the cage, ignoring it.

"They aren't doing anything," Mark whispered. As he leaned in close to the cages the lemmings raised their noses in the air and moved back and forth. They scratched at the glass and began to shake, and when Mark touched the cage, the animals threw themselves against the glass. Azawa leaned in close. "What the—"

Mark moved away and the lemmings calmed. When he approached again, they went into the same frenzy as before. "They can smell the blood from my lip," Mark said. "They can smell even that little bit of blood. And they want a taste of

it for themselves. Well enjoy yourself, guys. This is all you're ever going to get from me."

Mark lifted the lid on the cage and spit on one of the rats. Blood from his cut lip mingled with his spit, and both animals went after it. In a moment they were at each other, tearing at each other's flesh. In seconds they were both dead and the ripped carcasses lay unmoving. The lemming in the other cage flung itself against the glass, trying to get a piece. The alien rat huddled in the corner, shaking.

"Unbelievable," Azawa whispered as Mark took the cage with the two mangled lemmings and moved it away from the other cage. After a moment the remaining lemming



calmed.

Mark stood at a distance. "It ignores the blood of its own species . . . but only on superficial wounds?" he said.

Azawa nodded. "So it seems. Our blood makes them frenzy at any time, but their blood is only interesting if the wound is more than superficial. Only serious injury draws an attack. It's an evaluated response, not instinct. Garbage collection."

"They're doing a job?"

"Do you see why I want to get out of here as soon as possible, Mark? This doesn't make any sense. Unless—"

Mark nodded. "Unless they were designed just for us." He cast his eyes across the compound, at the great green jungle around him. He heard the noises of a rich diversity of life

and wondered. "Someone knew we were coming," he said, his voice low. "And the lemmings and tyrannosaurs are their unwelcome mat."



Mark awoke to the sounds of shouting and the static squeal of something caught in the fence. From the volume of the sound, that something was big.

He grabbed his weapon and rushed out of his tent. It was still dark out, but the far side of the compound was brightly lit by a combination of remote lights and the explosions of sparks arcing off a huge form that stood directly between two poles of the fence. In the dance of sparks and shadows, the tyrannosaur looked like something out of a nightmare.

Mark rushed to the far side of the compound. Sharon and Squatty stood directly in front of the creature and fired at it. Azawa knelt at the primary power transformer for the fence and shook his head. He was shouting, but his voice was drowned out by the shriek of electrostatic discharge from the fence and the thundering roars of the tyrannosaur.

Mark raised his own weapon and fired at the creature's head. As he squeezed off the first shot, the creature turned and looked straight at him with a cold gaze. But what made the stare frightening was the spark of intelligence he thought he saw there.

Mark aimed for its eyes and fired. The first eye popped and within moments began to ooze the same

brown fluid he had seen on the tyrannosaur who killed Scott Fitzwater. Its other eye remained fixed on Mark. It had stopped roaring and thrashing, and now stood absolutely still despite the violence of the electrostatic discharge going on all around it.

“Die,” Mark whispered and aimed for the pit behind the missing eye, where its bony skull should be thinnest.

He fired three times, and in a moment the entire animal collapsed in a puddle of brown goo that flowed in a spreading circle, staining the packed dirt of the compound. The puddle bubbled and seethed, and shrunk with every passing moment.

They all stood silent, staring at the

brown puddle. Jim Azawa finally spoke. "It wouldn't leave the field. It's supposed to hit the electrostatic field and be repelled. It just stood there." Azawa frowned. "If it was trying to wipe out the fence, it damn near succeeded." He pointed at a large dial on the fence's control panel. "The fence was designed to deliver short bursts over limited areas, not a sustained charge over an entire section. The fence is still there, but the power is way down. Using solar, it'll take at least three days to recharge. If we drain the lander's batteries that gets cut to two." He shook his head again. "It doesn't matter; if another one of those things tries that, we're dead. The fence goes down."

Mark stared at the brown puddle. It had stopped spreading, and now seemed to be hardening. He rushed back to his tent and came out a moment later with a handful of sample containers. He knelt at the edge of the brown goo and filled container after container with the stuff. After a few moments, it had solidified to where he could no longer dip it up. He chipped at the edge of the mass with a blade and knocked off a chunk, then scooped it into a bag and stood up. "Maybe we can learn something about this thing now." He held up his sample bag and smiled. "Didn't have to go after one at all; it came to us." He turned and headed for the small biology lab they had set up in the center of the compound.

Squatty shook his head. "Knock yourself out, Abrion," he whispered.

When Mark came back, Waite stepped forward. "Took you long enough to get out here and help us." The squat engineer looked down at his hands. "But that was a good plan to burrow through the eye. It never even occurred to me—I must have bounced twenty shots off its chest before you came." He extended his hand. "You're right; those things are hard to kill."

Mark hesitated a moment then took his hand. "Thanks, Dave. Thanks a lot."

Squatty nodded once and stepped away. Mark watched him go; that was the closest thing to nice Squatty had been with him in over a year.

Mark turned to Sharon. "It's intelligent," he said.

Sharon frowned. "What makes you say that?"

"Look at what it did. When it hit the field it should either have kept coming or it should have backed off. Only something intelligent will choose to deal with pain it could easily avoid; dumb animals will do whatever it takes to escape the pain." Mark shook his head. "It knew what it was doing."

Azawa piped up. "There's been at least one of them watching us since the day I first activated the fence. I think they've been studying us. They've learned there was a barrier, and they've decided to tear that barrier down."

Sharon nodded. "You mentioned



that before.” She pointed at Mark. “So did he. Assuming it was intelligent, what would its motive be in destroying our fence instead of coming straight through? It could easily have wiped us all out.”

Mark hesitated. He and Azawa had talked, had speculated in a moment of paranoid meandering that the tyrannosaurs and lemmings might be designed, created to defend the planet. But they had no proof, so they agreed to keep it to themselves until they had something more conclusive. They didn't need to add to the people's fears with unfounded speculation. Yet.

Mark shrugged. “Because we killed one of its family when we hit it while trying to land three days ago. Because

I hobbled one yesterday. Because we've invaded its planet and it doesn't like it. Any number of reasons."

"And it's going to get back at us by killing itself in front of us?" Sharon said. "That's supposed to scare us away?"

Mark grimaced. "You're the microbiologist, Sharon. Are you going to tell me that territorialism is unheard of in large animals? Besides, I didn't say they were smart, I said they were intelligent, that they had measurable IQs. They're bright enough to push us and see if we have the guts to protect ourselves."

"That hardly constitutes intelligence; any beast'll do that."

"But will they do it in a controlled way, sacrificing one of their members

for the good of the group? They're not rushing in at us in a frenzy of fear, they're prodding us—studying us. It seems to me like they have a fixation on us and are going about a systematic discovery of what we are and what we can do.”

“It had a fixation on you, not us,” Sharon said. “When you showed up, it calmed down like an unruly child who finally gets the toy. You seem to be the key to this thing’s obsession; what do you suggest we do now?”

Mark shrugged. “We could try to communicate. Or we can keep our distance until we have the wherewithal to protect ourselves. I haven’t been impressed with their manners so far, and I’d just as soon have the gunboat to back up our

diplomacy.”

Sharon rubbed distractedly at her hip and stared off through the fence. She looked at Waite and flicked her eyes toward the camp area off to her right. Waite nodded and moved away. She did the same to Azawa and he left.

She sat down on the camp stool. “I need your help Mark. I don’t know what to do here. This thing is getting out of control, and I don’t know how to handle it.”

Mark sighed. “I’m as lost as you are.”

She shrugged. “You’ve dealt with these situations before. You’ve dealt with making assignments that end up getting people—where people . . .”

“Where people end up dead?” Mark

whispered.

Sharon nodded. “I don’t claim to understand the politics of the situation, Mark. I know you’ve got seniority on me. You should have been picked to head up this little jaunt, and truth be told I’d like to let you take over. If I could, I would.” She looked down at her hands. “These things aren’t supposed to happen to us—who could prepare to be attacked by carnivorous rats and smart dinosaurs? This was supposed to be a routine fact-finding mission, a simple get-and-go operation.” She looked up. “I’m good at fact-finding—there’s little or nothing you can teach me about that.” She let her eyes drop. “But I’m not good at dealing with something that can’t be reversed, that

can't be corrected as new facts come in. I'm not good at dealing with situations where there is a possibility—where there is a likelihood—that people will be put in physical danger. Or die.” She shrugged. “We play the paramilitary game here in the company, but I'm a researcher, not a soldier. I don't know how to deal with this.” She shook her head. “I just don't know.”

Mark touched her shoulder. “There's no secret. You do what you have to do and don't worry. That's why every situation is covered in the regs. Follow the regs and it all works out.”

She laughed. “I recognize that line. Isn't it from the ‘personnel in crisis’ section of the planetfall manager's

guide?”

Mark smiled. “It’s all covered. And if it isn’t covered, trust the people who chose you to know what they were talking about.” He sighed. “I trust you. If I didn’t think you could do the job, I wouldn’t have come.” He was silent for a moment. “As for the irreversibility of what’s happened here . . . that’s the risk we all ran when we signed on. If we’d wanted safety, we’d have stayed Earthside. You’re doing everything right. Probably better than I could have.”

They sat in silence for a long moment, then Sharon stood up. “Thanks, Mark. I hope you aren’t just being nice.”

He smiled. “You know me better than that.”

Sharon sighed. "I was starting to wonder if that was true. You've been treating me like I was just another one of the guys since this thing started."

Mark took her hand. "I've been treating you like my commander, Sharon." He sighed. "I was afraid to do anything else. I didn't know how else to handle you."

"How about treating me normally?"

Mark stood up. "I can't do that; it'll look like I'm working you for favors. When I was in charge of the group, no one could accuse me of that."

"No one is accusing you of anything of the sort."

"Squatty did."

Sharon laughed, a soft, sweet sound. She took Mark's hand. "Squatty has been trying to create some kind of



relationship for years now. I like him, but he's just a friend. I told him last night—after his little scene with you. He didn't like it, but he had to know it. He shouldn't be trying to protect his territory any more.”

Mark nodded, but his face was grim. “As long as he gets that lander fixed, he can believe anything he wants to.”



Mark Abrion stood at the fence and gazed out at the rats that milled about just a few feet away on the other side of the electrostatic field. The ground was covered with them as far as he could see. They had eaten all the greenery for a hundred yards around, and trampled the ground with their tiny feet until it was just as hard-packed and dusty as the ground

inside the fence—ground sterilized by the best machinery modern technology had to offer.

In the failing light of twilight they were like a living carpet, seething and twisting. Like something out of a nightmare. But they were real. Deadly real.

Mark watched a rat wander too close to the fence. A loud snap and a flash of static electricity knocked the rat on its side and charred its fur. Hardly before the sound died out other rats were on it, tearing at its flesh. In seconds it was over, and the remaining rats returned to the business of milling about and waiting for another meal to present itself.

The rats had started to congregate immediately after the tyrannosaur

tried to disable the fence two days ago. Within hours thousands of the rodents crowded around the fence, and over the past two days they had continued to stream in until the landscape was dominated by them. At first they had pushed in against the fence, dying by the hundreds. But after only a few hours they learned that they could not get through and they began to leave a space between themselves and the fence.

And they waited.

Mark smiled. He had learned their secret. Or, rather, he had learned the secret of the tyrannosaurs, and that was enough. They had ceased to be a terror of unknowable proportions; now they were just rats responding to scent and a pheromone, like any other

rat. Now they could be controlled.

Mark looked at his watch. It was time for his briefing. He headed back to the conference area in the center of the compound. Sharon and Azawa were already there.

“Hi,” he said. “Where’s Dave?”

“He’s in the lander working on the comm. Still,” Azawa said.

Sharon nodded. “He says it’s nearly ready. He transmitted a short message this morning, but the receiver is still out. He called for the backup lander, but couldn’t confirm the message got through. He says he can finish it any minute.”

Mark smiled. “Good, good. And with over thirty-six hours to spare before the shuttle passes by—well within limits.” He nodded and sighed.

“It looks like the worry is past.”

Azawa coughed and flicked his gaze at the milling lemmings. “I wouldn’t say it was vacation time just yet.”

“The fence seems to be doing a good job keeping them out,” Mark said. “We can’t do much in terms of research—I know I’m not going outside the fence while those things are out there—but we’ve already learned enough to make the trip worth it.”

Azawa shook his head. “We’re not safe yet. Even if Squatty does get the comm fixed this morning, the backup lander won’t arrive until tomorrow, and we can’t lift until a week from tomorrow. We’ve got to stay put and safe for eight more days.”

“I haven’t seen a tyrannosaur in two

days, and that frankly scares me.” Sharon said. “I know it’s paranoid, but it’s like they’re making a plan or something. If they decide to come after us, we’re dead.”

He smiled until Sharon finally reacted. “Okay, Mark. What do you want to tell us so bad?”

Mark laughed. “Thank you for asking. I don’t know how much longer I could have held out.” He sat down, and when he looked up his face was serious. “I can stop the tyrannosaurs.”

Azawa stared. “And?”

“I have the answer right here.” Mark picked up a small rifle from the table.

Azawa took the gun from Mark. “This is a dart gun. How are we going to stop the tyrannosaurs with a dart

gun when pulse-rifles barely slow them up?”

Mark sat down on the edge of the table. “When that tyrannosaur fried itself in the fence, I was able to get a sample, and I found a surprise. Myxobacteria.”

Sharon shook her head. “Inside an animal? Myxobacteria are normally associated with decaying plant matter.”

Mark nodded. “That’s the beauty of it. Normally myxobacteria are neutral to animal tissue. But with the tyrannosaurs, the bacteria are stored in the tissues and remain dormant until the tyrannosaur is injured. The animal releases an endorphin which activates the bacteria. The bacteria release an exolysin that bursts the cells

around them, causing the putrefaction we noted. The flesh is reduced to a raw liquid which runs from the wound and separates at the sections we saw, releasing a pheromone that calls the rats. It's totally normal, except that the bacteria have been altered to work on animal cells, and to do so very quickly."

Sharon frowned. "Altered?"

"There's no way those things evolved naturally," Mark said, his face grim. "They were engineered."

"You're sure?" Azawa asked.

Mark nodded. "Look at the way the pieces link. There's nothing that occurs naturally on this planet that can hurt the tyrannosaurs; the only thing that could hurt them is something from outside the



ecosystem, something with the power to penetrate that hard skin.”

Azawa nodded. “Someone like us with our pulse rifles.”

Mark nodded. “When the hide is penetrated, the myxobacteria are activated and leave their cysts,” he continued. “They metabolize the flesh, releasing a scent that draws the lemmings. The lemmings take care of the invaders, destroying them if they so much as scratch themselves. It’s incredibly elegant.”

“To what purpose?” Azawa asked.

“Part of a planetary defense system?” Sharon offered.

“So what?” Azawa said.

Sharon looked at him. “What do you mean, ‘so what’? What else do you want?”

“It’s ineffective as a defense,” Azawa said. “So they destroy our team. So what? Is that supposed to stop others from coming? Habitable planets are too rare to abandon because of a few hostile animals. If your ‘designers’ are smart enough to build the tyrannosaur, they’re smart enough to know that nasty rats and sectionalized dinosaurs aren’t enough to keep someone out who really wants in. It makes no sense.”

Sharon pursed her lips. “That changes our entire focus. If there are intelligent beings here capable of engineering life, we’ve somehow missed finding it.” She stood up and looked toward the edge of the compound, toward the mass of rats milling about outside the fence. “But

we made all the checks. Even if we somehow missed their communication, there's no surface sign of ordered life here. No roads, no cities, nothing."

"And I don't think we'll ever find them," Mark said. "I think they're dead and gone, and all we've found is the signs of their passing."

"What makes you say that?" Sharon asked.

Mark hesitated. "I don't know what it means yet, but I've found a message. One only leaves a message when they don't expect to be around to communicate in person."

"What kind of message?"

Mark shrugged. "I don't know. I don't even know that it is a message—it could be natural, though I've never

seen anything like it. It's an unused chromosome that contains patterned codons pairs. And I've found it not only in the lemmings and the tyrannosaurs, but the bacteria as well." He frowned. "In each case there was a chromosome capped by sixteen sets of sixteen identical codon pairs, each set with a different pair—like an alphabet or a set of counting numbers. That's what made me decide it was a message."

"Can you decode it?" Sharon asked.

Mark shook his head. "I don't have any idea how to start, and even if I did, I don't have the equipment. Maybe back on the *Valkyrie*, but not here. If we had comm, I'd transmit it now. Until Squatty fixes the comm, we have to sit on it."

Sharon sat down at the table. “The biggest news of our lifetimes, and all we can do is wait—if we can hold out against the local animal life.” She sighed. “So how is your air rifle going to protect us from the tyrannosaurs?”

“We use the tyrannosaur’s own defenses against it. The dart is tipped with the cell rupturing exolysin, and the cartridge contains the endorphin that activates the dormant myxobacteria. We can take out any section—including the head, which takes the rest of the body with it—with a single shot. That covers us; the fence keeps out the lemmings, and the rifle takes out the tyrannosaurs that get too close.”

Azawa smiled. “So there’s no more worry.” He slapped Mark on the arm.

“I could kiss you, man. Good job.”

They heard noise from the lander and looked up. Dave Waite came down the two metal steps and walked slowly toward them. When he got close, Sharon spoke up. “Finished?”

Dave looked up. “Yeah. I got through to the shuttle. The lander will be here tomorrow.” He looked down at his feet.

“Mark figured out how to stop the tyrannosaurs. We’re clean until we can get out of this place.” Azawa said.

Dave nodded. “We’re lucky, I guess.”

Sharon touched the squat engineer’s shoulder. “What’s wrong?”

Dave hesitated, then looked up. “We’re the only ones left. The other three crews were totally annihilated.”

Mark felt his heart go cold. “How did it happen?”

Dave shook his head. “For group one it was frogs. Group two got locusts. Group four got blue jays. Blue jays! Pecked ‘em to death.” He shook his head. “And they all had tyrannosaurs. All of them.”

Azawa reached for the air rifle. “I’d say their message is pretty clear.” He loaded a dart into the rifle’s chamber and cocked it.

Dave wandered back to the lander; Azawa took the rifle and retired to his tent.

Mark moved to the fence and watched the lemmings. Though physically familiar, they were totally alien, inscrutable. He wanted to understand them, but nothing came.

Sharon walked up and stood beside him.

Mark touched her, and she leaned in close. He put his arm around her and pulled her tight. He wanted to say something, but nothing seemed appropriate, so he just stood and held her.

He felt the gentle shaking of suppressed sobs, and he squeezed her tight. After a moment the shaking stopped and she looked up at him. "I should be happy. We've survived against a planet that's killed everyone else. I should be happy." She sighed. "I'm just not cut out for this."

Mark touched her face. "No one is."

She hugged him close, and for a moment Mark was content. But the ever-present rush of the lemmings



invaded his serenity, brought him back from the satisfaction he felt in being here with Sharon, and he could only hope that they were indeed safe.



Mark slept poorly. The instant he fell asleep, images rushed into his mind. Images of frogs and lemmings, blue jays and locusts. And tyrannosaurs standing impassively by and watching, always watching.

The images kept him from getting deep sleep, and he woke often. And each time he woke up, the images stood stark and strong in his mind until the quiet rush of thousands of tiny feet brushing the ground relaxed him with its gentle sound and he slept again.



Mark was awakened by the roar and whine of the lander's arrival. He felt the thunderous resonance of its landing jets through the ground as it touched down, and rushed out of his tent. He could see it clearly, just a hundred meters away toward the west, steam and smoke just settling down around it.

Sharon and Waite came out of their respective tents; Azawa already stood at the edge of the compound. Jim turned around. "There it is. Now it's just the wait."

Mark stood silent and stared. On each side of the lander huge figures rose up from the surrounding brush. Two, then three forms seemed to grow up out of the underbrush; two more forms stepped from behind. In a

moment there were five tyrannosaurs standing in a ring around the newly arrived lander. Mark opened his mouth, but no sound came out; all he could do was point.

Sharon saw them next, then Waite. Azawa turned to see what the others stared at, and his surprised shout echoed through the compound. At the sound the tyrannosaurs looked up at them. As one they moved forward.

Waite grabbed the air rifle and ran to the edge of the compound. The tyrannosaurs moved forward with their frightening speed, and as they came, they split, moving around the perimeter of the compound. Waite took aim and fired at the nearest tyrannosaur, hitting it on the shoulder. The section dissolved in

seconds, but the huge lizard never stopped moving. Waite fired again and hit the alien monster directly between the eyes. It roared, but the sound was cut short as it dissolved into a pool of brown goo.

Before Waite could turn and aim at another tyrannosaur, the four remaining lizards stepped forward into the electrostatic field of the fence. Sparks lanced off the huge dinosaurs, but they stood their ground. In seconds the electrostatic field was drained and the barrier failed.

Rats poured into the compound. Azawa fell instantly under the crush of bodies and was gone.

Mark was nearly knocked to the ground by the mass of lemmings rushing past his feet. He caught his

balance and spread his legs apart, braced himself against the rush of bodies breaking over his feet and ankles like a demon tide. Behind him he heard Sharon scream for only a moment, then the sound was cut short.

“Sharon!” he shouted, but he knew it was too late. He tried not to picture the rats swarming over her body, sharp teeth ripping her flesh, tiny claws tearing her skin. Unbidden, images of Ross and their initial crash flashed into his mind; scurrying bodies, the blood, the bone, the screams . . .

He heard the pop and boil of two more tyrannosaurs as Waite hit them with the air rifle. Then he heard a startled cry, “No!” Then silence.

Mark closed his eyes and waited. There was nothing he could do. He was at the mercy of the rats and tyrannosaurs. He wanted to run, but there was nowhere to go. He wanted to shout for help, but there was no one left to hear.

An image from his dreams imprinted itself behind his eyelids, a scene of rats stripping the meat from the bones of their victim, tyrannosaurs standing by and watching.

Mark snapped his eyes open and stood directly across from a tyrannosaur that looked down at him with its impassive stare.

As he stood, other tyrannosaurs came out of the surrounding rain forest and moved in close, standing in a circle around him, and Mark

noticed that the rats moved away. In a moment seven dinosaurs stood silent and looked down at him, and in a few moments the lemmings had cleared the area inside the ring of tyrannosaur sentinels, leaving him alone.

Mark looked for a gap, but there was no escape; the huge lizards had him hemmed in.

He looked up at them. "What?" He shouted. "What are you waiting for?"

But they only stared down at him, impassive. After a moment they turned away and started to move.

Mark stood still until the tyrannosaur behind him pressed in close, then gently pushed him forward with its delicate hand. Mark stumbled two steps and stopped. The lizard pushed harder.

Mark let the dinosaurs herd him forward. As they walked, the lemmings parted before them so that they moved through the mass of rodents like the passage of Israel through the depths of the Red Sea. When they passed, the lemmings closed in behind like a tide rushing in to the shore. But they did not enter the ring defined by the tyrannosaurs.

They moved in this way for five minutes before Mark realized they were heading for the backup lander. When they reached it, the dinosaurs in front moved to the side and the ones behind ushered him right up to his door. Mark clambered up the stairs and worked the latch. The metal was still hot from the friction of entry, but he pushed his way in and sealed



the door behind him.

He rushed to the comm and called the shuttle. But even as he called, he knew it was too late. The shuttle had already passed Ernte and was now on the final swing of the eccentric elliptical orbit that would allow it to gather the speed necessary to catch up to the *Electric Valkyrie*. It would pass by Ernte on its way toward that final slingshot. But that would not happen for seven more days. Then he would have a narrow window of opportunity where he would be able to match his own orbit with that of the shuttle for a short time, and dock before they flipped themselves toward the huge transport.

Mark sat down and stared out the forward viewport. The tyrannosaurs

were there, watching and waiting. He wanted to shout at them, to explain that he had to wait, that he would gladly leave their planet if he could, except that he had to wait. For seven more days.

Somehow, though, he knew there was no need. Whoever had built the tyrannosaurs had taught them to wait and watch. They did not care about him or his world. They were not concerned with his life or his grief. They were not affected by the loss of their friends and comrades. They did not mourn for Sharon.

They did keep watch, though. And they did not allow Mark to leave the ship. So Mark did what he could to keep himself busy. He transcribed as much as he could about what had

happened to him since the landing, transmitting the record back to the shuttle twice a day lest the tyrannosaurs attempt to hasten his departure. But they did not harass him, they only watched and waited.

It was late afternoon on day three when he ran out of things to do. He had written all the reports, filed all the forms, sent all he knew to the ship. He had sat at the forward console and stared out at his guards, thinking, wondering, reviewing.

Thoughts of their final attack flooded his mind and he tried to think of what he could have done differently, how he could have changed the outcome. Sharon's last scream still echoed in his mind, then abruptly cut off, only to repeat again.

Over and over. He tried to remember whether he had told her he loved her. It was suddenly very important that he remember, but nothing came to him, only the memory of her last scream piercing him like an icy dagger.

Mark stood up, yanked open the shuttle door and stood in the doorway looking out at the huge lizards. "Why me?" He screamed. "Why not Sharon? She was smarter than me, better than me. She was the drop leader, not me! Why not her?"

One of the tyrannosaurs turned and seemed to listen to him, and Mark gazed into its cold eyes. A spark of intelligence glowed there, a hint of independent thought and the ability to reason.

“Why me?” Mark said quietly.

The dinosaur gazed at him, then turned and took a dozen lumbering steps until it stood in a field of tall grass. It leaned over and opened its enormous mouth to take a bite, then stopped and looked back at Mark. It stretched its neck to the right, then the left, each time opening its mouth, each time stopping short of eating the grass.

Then it turned and walked toward him. It stopped at the edge of the grass twenty feet away and bent its head down, swinging left, right, then center, its eyes never leaving Mark's face. Then it closed its eyes, reached down, and pulled up a great mouthful of the thin grass. It stood up, opened its eyes, and chewed placidly. When it

swallowed, it gazed at him for a long moment, then turned and moved away. It did not look back.

Mark closed and sealed the door, fell into the command chair. "Chance," he whispered, his voice strange to his own ears. "Random stinking chance," he said, louder. "If I'd let the rats get me, she might have survived." He frowned. "No, Squatty was still there; it might have been him."

He puzzled at it, tried to decide how he could have arranged for Sharon to live. They needed for one to survive, just one. If only he had understood the rules of the game earlier he could have done something about it, he could have made sure. He could have —

He could have killed his own crewmates to make sure that Sharon was the last.

Mark closed his eyes, leaned forward against the bulkhead. Anger and grief and helplessness welled up in him, pushed up through his chest, filled his head until it pounded behind his eyes, burned in his nose. "Sharon," he whispered. "I'm sorry."

He pushed his grief down into his stomach, stuffed it into a hole until he could deal with it properly. If only he had something from her, something he could take back with him so he could lay her to rest in his own way. But the tyrannosaurs had taken that away from him, too.

In the days that followed, Mark worked on the mystery of the unused

chromosome fragment, kept his mind busy even as the cold place in his chest grew.

The key was in the repeating patterns that capped each unused chromosome. The bacteria, rats, and tyrannosaurs all had an unused chromosome; each unused chromosome contained the same end sequences—the same codon pair repeated sixteen times, followed by a different pair repeated sixteen times, then another, until there were sixteen different sets of sixteen identical members. But he couldn't see the meaning in the essentially random patterns enclosed by these endcaps—at least not in the rat or the tyrannosaur.

The bacteria contained a repeating



sequence. If he assigned a numerical value to each codon pair based on the pattern of the endcaps, the sequence came out with a clear pattern:

211 321 431 541 651 761  
871 981 1091 11101 12111  
13121 14131 15141 16151

Two minus one is one. Three minus two is one. Four minus three is one. And so on to the end. It was a clear message, an impossible sequence, but he couldn't see what it meant.

The rats and tyrannosaurs were a different story. There were only three pairs—1, 2, and 16—and while he recognized that every 1024th digit was 16, the remaining digits were a random mix of 1 and 2, with 1 represented at least ten times as often as 2. He just couldn't see the pattern,

couldn't see how—

The answer came like a thunderclap.  
See.

If each 1 and 2 represented the binary on or off, and the 16 represented the end of a line, the sequence could be lined up as a bitmap, a black and white picture.

He decoded the rat chromosome first and a series of images resolved from the sequences, snapshot frames of action frozen in inaction. First came a picture of a single ship traveling through space, bound for an approaching star. Then a landing craft coming to rest amidst the lush splendor of a paradisaical garden beneath a glorious sun. Then a tyrannosaur, looking out over its domain with its air of unconcerned

sovereignty. Then rats and locusts and birds and frogs picking at the bones of those who had landed, the shadowed form of one of the crew watching from the background, a tyrannosaur standing by. And finally, the ship leaving the star system, retreating into the emptiness of space with one undeniably human face pressed against a window.

The tyrannosaur offered a different series of pictures. Multiple ships approaching a distant star. Then dozens of landing craft on a planet's surface. Then hundreds of people firing weapons at the local animals, followed by twisted wreckage and a sea of dead humans. And finally, a scene of space with no ships and a dimmed star in the far distance.

One. However many came in the survey ships, only one would return. But if more came, a colonization or invasion fleet, none would survive. A simple warning. Leave here or die.

Mark stood up, rushed to the door and flung it open. The tyrannosaurs were there, staring back at him with their infinite patience, their cold expressions. "I can't make my people stay away from here!" He shouted at them. "It doesn't matter what I say, they'll come anyway. We'll destroy you. Don't you understand? We'll destroy you because we have to."

But the dinosaurs only watched, silent and impassive. There was no reasoning with these mute guards built to watch him. Their creators had left them behind, incapable of

presenting their message in anything clearer than genetic bitmaps and simple math.

Mark closed the door and stumbled to his bunk. Jim Azawa was wrong; this *was* an effective planetary defense. The predatory beasts of the planet Ernte stood as irrefutable proof of their creators. Just as Humanity had placed electronic markers that beamed radio and microwave transmissions to all who would hear, the creators of Ernte's messengers had made their own claim clear.

But the Planetary Assessment Corporation could not afford to accept their absentee claim; they would only accept it when the creators came forward to defend it themselves. Mark had no idea what that might mean,

but he knew such a meeting would be brutal—their tyrannosaur pets made that perfectly clear.

The days passed, and Mark Abrion slept and ate and tried not to think, tried not to acknowledge the stain that spread on his soul, the anger that hardened inside him with each passing hour. When the day came for his departure, Mark lifted off. As the lander soared up and away from the surface the anger solidified into a cold resolve.

Ernte would pay for its cold indifference to human life. It would pay for Sharon. Because he knew their secrets, he had discovered how to kill the dinosaurs. A simple exolysin that could be sprayed from the sky and that would reduce the damned

tyrannosaurs to nothing. And he would find a poison to destroy anything that carried earth-type DNA, even if he had to sterilize the whole planet. It didn't matter what happened to the biosphere, that could be repaired after the fact if necessary.

He watched the planet recede beneath him and he studied it, burned the details of it into his mind. Because he would return to Ernte some day. And when he did, he would teach the tyrannosaurs and their rat servants the true meaning of fear.

# Afterword

This is the story that made me first suspect I was actually a novelist rather than a short story writer. I had just finished an absurd-ish short based on a fictional Law of Universal Conservation (“Deeper and To the Left, or The Difficulties of Being Roger”) and I wanted to write a straight science fiction story. The general market trend at the time was toward fantasy, so I followed my contrary nature and decided to write against trend.

Problem was that I had nothing in mind. I had used up all the easy stories, so I had to sit down with malice of forethought and generate this from nothing. In the process, I became aware of a number of



recurring ideas from other stories and formed them into a single, coherent universe that is now the framework of a ten-book series I'm working on.

While researching another story I had come across the idea of myxobacteria normally associated with soil decomposition and the metabolism of insoluble organic components. The bacteria could aggregate to form semicomplex entities (vaguely like slime molds) capable of generating and using enzymes impossible for a single bacterium to produce. Very cool stuff.

One technique for story generation is to put something where it doesn't belong, then tell the story of how it got there. Where don't myxobacteria belong? Inside animal tissues. Why

would they be there? Because someone put them there. Why? As a clear and undeniable proof of artificial biological engineering. Why? As a warning to advanced races to come no further. Why? Because they saw us coming, and don't trust us . . . yet.

I could already see that the larger questions (who, how advanced, why no contact) would require many, many more pages than I could devote to a novella. I knew right then that I should write it as a novel, but the idea of writing an entire novel scared me at the time so I pared it down to this more manageable novella.

But the larger framework was still there, and incorporated many elements that I had raised elsewhere—the Planetary Assessment

Corporation, Germany as an ascendant power, narrow windows of opportunity to learn before corporate processes chose market exploitation over the pursuit of knowledge for its own sake. So I chose a few elements, suggested the larger world, and started writing.

This story was a finalist in the L. Ron Hubbard Writers of the Future Contest and was sold to an early e-zine pioneered by Arlen Card—brother of Orson Scott Card. It is also the basis of a forthcoming novel.