

The Locusts



Larry Niven, Steve Barnes

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THE LOCUSTS

by Larry Niven and Steve Barnes

There are no men on Tau Ceti IV.

Near the equator on the ridged ribbon of continent which reaches north and south to cover both poles, the evidence of Man still show& There is the landing craft, a great thick saucer with a rounded edge gaping doors and vast empty space inside. Ragged clumps of grass and scrub vegetation surround its base, now. There is the small town where they lived, grew old, and died: tall stone houses, a main street of rock fused with

atomic fire, a good deal of machinery whose metal is still bright. There is the land itself overgrown but still showing the traces of a square arrangement that once marked it as farmland.

And there is the forest reaching north and south along the sprawling ribbon of continent, spreading even to the innumerable islands which form two-thirds of Ridgeback's land mass. Where forest cannot grow, because of insufficient water or because the carefully bred bacteria have not yet built a sufficient depth of topsoil, there is grass, an exceptionally hardy hybrid of Buffalo and Cord with an abnormal number of branching roots, developing a

dense and fertile sod.

There are flocks of moos, resurrected from a lost New Zealand valley. The great flightless birds roam freely, sharing their grazing land with expanding herds of wild cattle and buffalo.

There are things in the forest. They prefer it there, but will occasionally shamble out into the grasslands and sometimes even into the town. They themselves do not understand why they go: there is no food and they do not need building materials or other things which may be there for the scavenging. They always leave the town before nightfall arrives.

When men came the land was as barren as a tabletop.

Doc and Elise were among the last to leave the ship. He took his wife's hand and walked down the ramp, eager to feel alien loam between his toes. He kept his shoes on. They'd have to make the loam first.

The other colonists were exceptionally silent, as if each were afraid to speak. Not surprising, Doc thought, The first words spoken on Ridgeback would become history.

The robot probes had found five habitable worlds besides Ridgeback in

Earth's neighborhood. Two held life in more or less primitive stages, but Ridgeback was perfect. There was one-celled life in Ridgeback's seas, enough to give the planet an oxygenating atmosphere; and no life at all on land. They would start with a clean slate.

So the biologists had chosen what they believed was a representative and balanced ecology. A world's life was stored in the cargo hold now, in frozen fertilized eggs and stored seeds and bacterial cultures, ready to go to work.

Doc looked Out over his new home, the faint sea breeze stinging his eyes. He had known Ridgeback would be barren, but he had not expected the feel of a barren

world to move him.

The sky was bright blue, clouds shrouding Tau Ceti, a sun wider and softer than the sun of Earth. The ocean was a deeper blue, flat and calm. There was no dirt. There was dust and sand and rock, but nothing a farming man would call dirt. There were no birds, no insects. The only sound was that of sand and small dust-devils dancing in the wind, a low moan almost below the threshold of human hearing.

Doc remembered his college geology class' fieldtrip to the Moon. Ridgeback wasn't dead as Luna was dead. It was more like his uncle's face, after the

embalmers got through with him. It looked alive, but it wasn't.

Jase, the eldest of them and the colony leader, raised his hand and waited. When all eyes were on him he crinided his eyes happily, saving his biggest smile for his sister Cynn timer, who was training a hobotape camera on him. "We're here, people," his voice boomed in the dead world's silence. "It's good, and it's ours. Let's make the most of it."

There was a ragged cheer and the colonists surged toward the cargo door of the landing craft. The lander was a flattish dome now, its heat shield burned almost through, its Dumbo-style atomic motor buried in dust. It had served its

purpose and would never move again. The great door dropped and became a ramp. Crates and machinery began to emerge on little flatbed robot trucks.

Elise put her arm around her husband's waist and hugged him. She murmured, "It's so empty."

"So far." Doc unrolled a package of birth control pills, and felt her flinch.

"Two years before we can have children."

Did she mean it as a question? "Right," he said. They had talked it through too often, in couples and in groups, in training and aboard ship. "At least until

Jill gets the ecology going."

"Uh huh." An impatient noise.

Doc wondered if she believed it. At twenty-four, tall and wiry and with seven years of intensive training behind him, he felt competent to handle most emergencies. But children, and babies in particular, were a problem he could postpone.

He had interned for a year at Detroit Memorial, but most of his schooling related directly to General Colonization. His medical experience was no better than Elise's, his knowledge not far superior to that of a 20th century GP. Like his shipmates, Doc was primarily a

trained crewman and colonist. His courses in world settling-"funny chemistry," water purification, basic mine engineering, exotic factor recognition, etc.-were largely guesswork. There were no interstellar colonies, not yet.

And bearing children would be an act of faith, a taking possession of the land. Some had fought the delay bitterly. The starship would have been smelling of babies shortly after takeoff if they'd had their way.

He offered Elise a pill. "Bacteria and earthworms come first. Men last," he said. "We're too high on the chain. We can't overload the ecology-"

"Uh huh."

"-before we've even got one. And look-"

She took a six-month birth control pill and swallowed it.

So Doc didn't say: suppose it Doesn't work out? Suppose we have to go home? He passed out the pills and watched the women take them, crossing names off a list in his head.

The little robot trucks were all over the place now. Their flat beds were endless belts, and they followed a limited repertoire of voiced orders. They had the lander half unloaded already. When

Doc had finished his pill pushing he went to work beside Elise, unloading crates. His thirty patients, including himself, were sickeningly healthy. As an unemployed doctor he'd have to do honest work until someone got ill.

He was wrong, of course. Doc had plenty of employment. His patients were doing manual labor in 1.07 gravities. They'd gained an average of ten pounds the moment the landing craft touched down. It threw their coordination and balance off, causing them to strain muscles and gash themselves.

One of the robot trucks ran over Chris' foot. Chris didn't wince or curse as Doc manipulated the bones, but his teeth

ground silently together.

"All done here, Chris." Doc smiled. The meteorologist looked at him bleakly from behind wire-rimmed glasses, eyes blinking without emotion. "Hey, you're a better man than I am. If I had a wound like that, I'd scream my head off"

Something only vaguely like a smile crossed Chris' lips. "Thanks, Doc," he said, and limped out.

Remarkable control, Doc mused. But then again, that's Chris.

A week after landing, Ridgeback's nineteen-hour day caught up with them. Disrupted body rhythms are no joke;

adding poor sleep to the weight adjustment led to chronic fatigue. Doc recognized the signs quickly.

"I'm surprised that it took this long," he said to Elise as she tossed, sleepless.

"Why couldn't we have done our adjusting on ship?" she mumbled, opening a bleary eye.

"There's more to it than just periods of light and darkness. Every planet has its own peculiarities. You just have to get used to them before your sleep cycles adjust."

"Well what am I supposed to do? Jesus, hand me the sleeping pills, wouldja

please? I just want to sleep."

"Nope. Don't want anyone hooked on sleeping pills. We've got the 'russian sleep' sets. You'll have one tomorrow." The "russian sleep" headsets were much preferred over chemical sedatives. They produced unconsciousness with a tiny trickle of current through the brain.

"Good," Elise yawned. "Sunset and dawn, they both seem to come too soon."

The colony went up fast. It was all prefabs, makeshift and temporary, the streets cluttered with the tools, machinery and electric cables which nobody had put away because there was no place for them. Gradually places

were made. Hydroponic tanks were assembled and stocked, and presently the colonists were back on fresh food.

Much more gradually, the stone houses began to appear.

They blasted their own rock from nearby cliffs with guncotton from the prefab chemical factory. They hauled the fractured stone on the robot trucks, and made concrete to stick it together. There was technology to spare, and endless power from the atomic motor in the landing craft. They took their time with the houses. Prefabs would weather the frequent warm rains for long enough. The stone houses were intended to last much longer. The colonists built thick

walls, and left large spaces so that the houses could be expanded when later generations saw fit.

Doc squinted into the mirror, brushing his teeth with his usual precise vertical movements. He jumped when he felt a splash of hot water hit his back. "Cut that out, Elise," he laughed.

She settled back in her bathtub, wrinkling her nose at him. Three years of meager showers on the ship had left her dying for a real bathtub, where she could waste gallons of water without guilt.

"Spoilsport," she teased. "If you were any kind of fun, you'd come over here

and . .

"And what?" he asked, interested.

"And rub my back."

"And that's supposed to be fun?"

"I was thinking that we could rub it with you." She grinned, seeing Doc's eyes light up. "And then maybe we could rub you with me . .

Later, they towed each other off, still tingling. "Look!" Doc said, pulling her in front of the mirror. He studied her, marveling. Had Elise become prettier, or was he seeing her with new eyes? He knew she laughed louder and more often

than when they had met years ago in school, she the child of a wealthy family and he a scholarship student who dreamt of the stars. He knew that her body was more firm and alive than it had been in her teens. The same sun that had burnt her body nut-brown had lightened her reddish hair to strawberry blond. She grinned at him from the mirror and asked, "Do you propose to take all the credit?"

He nodded happily. He'd always been fit, but his muscles had been stringy, the kind that didn't show. Now they bulged, handsome curves filling out chest and shoulders, legs strong from lifting and moving rock. His skin had darkened

under the probing of a warm, friendly sun. He was sleeping well, and so was she.

All of the colonists were darker, more muscular, with thicker calluses on hands and feet. Under open sky or high ceilings they walked straighter than the men and women of Earth's cities. They talked more boldly and seemed to fill more space. In the cities of Earth, the ultimate luxury had been building space. It was beyond the means of all but the wealthiest. Here, there was land for the taking, and twelve foot ceilings could be built. The house Doc was building for Elise-almost finished now-would be as fine as any her father could have built

for her. One that would be passed on to their children, and then to their grandchildren .

She seemed to echo his thought. "One last step. I want a bulge, right here," and she patted her flat abdomen. "Your department."

"And Jill's. We're up to mammals already, and we're adjusting. I've got half the 'russian sleep' sets back in the infirmary already."

The Orion spacecraft was a big, obtrusive object, mace-shaped, cruising constantly across the sky. What had been a fifth of a mile of deuterium snowball, the fuel supply for the starship's battery

of laser-fusion motors, was now a thin, shiny skin, still inflated by the residue of deuterium gas. It was the head of the mace. The life support system, ending in motors and shock absorbers, formed the handle.

Roy had taken the ground-to-orbit craft up and was aboard the Orion now, monitoring the relay as Cynn timer beamed her holotape up. It was lonely. Once there had been too little room; now there was too much. The ship still smelled of too many people crowded too close for too long. Roy adjusted the view screen and grinned back at Cynn timer's toothy smile.

"This is Year Day on Ridgeback," she

said in her smooth announcer's voice. "It was a barren world when we came. Now, slowly, life is spreading across the land. The farming teams have spent this last year dredging mulch from the sea bed and boiling it to kill the native life. Now it grows the tame bacteria that will make our soil." The screen showed a sequence of action scenes: tractors plowing furrows in the harsh dirt; colonists glistening with sweat as they pulled boulders from the ground; and Jill supervising the spreading of the starter soil. Grass seed and earthworms were sown into the trenches, and men and machines worked together to fold them into the earth.

Cynnie had mounted a camera on one of the small flyers for an aerial view. "The soil is being spread along a ten-mile strip," she said, "and grains are being planted. Later we'll have fruit trees and shade trees, bamboo and animal feed."

It was good, Roy thought, watching. It was smooth. Getting it all had been rough enough. Before they were finished the colonists had become damn sick of Roy and Cynnie poking their cameras into their every activity. That sign above the auditorium toilet: Smile! Roy Is Watching!

He'd tried to tell them. "Don't you know who it is that builds starships? It's taxpayers, that's who! And they've got to

get something for their money. Sure we're putting on a show for them. if we don't, when election time comes around they may ask for a refund."

Oh, they probably believed him. But the sign was still up.

Roy watched Cynn timer interview Jase and Brew in the fields; watched Angie and Chris constructing the animal pens. Jill thawed some of the fertilized goat eggs and a tape was shown of the wriggling embryos.

"At first," Cynn timer reminisced, "Ridgeback was daunting. There was no sound: no crickets, no birdsongs, but no roar of traffic either. By day, the sky is

Earthlike enough, but by night the constellations are brighter. It's impossible to forget how far from home we are-we can't even see Sol, invisible somewhere in the northern hemisphere. It's hard to forget that no help of any kind could come in much less than twenty-five years. It would take five years just to refuel the ship. It takes fourteen years to make the trip, although thanks to relativity it was only three years 'ship time.'

"Yes, we are alone." The image of Cynnie's sober face segued to the town hall, a geodesic dome of metal tubing sprayed with plastic. "But it is heartening that we have found, in each

other, the makings of a community. We come together for midday meal, discussions, songfests and group worship services."

Cynn timer's face was calm now, comforting. "We have no crime, and no unemployment. We're much too busy for marital squabbles or political infighting." She grinned, and the sparkle of her personality brought pleasure to Roy's analytical mind. "In fact, I have work to do myself. So, until next year, this is Cynn timer Mitchell on Ridgeback, signing off."

A year and a half after landing, a number of animals were out of incubation with a loss of less than two percent. The

mammals drank synthetic milk now, but soon they would be milling in their pens, eating Ridgeback grass and adding their own rich wastes to the cooking compost heaps.

Friday night was community night at the town hail.

From the inside the ribs of the dome were still visible through the sprayed plastic walls, and some of the decorations were less than stylish, but it was a warm place, a friendly, relaxing place where the common bond between the Ridgebackers was strengthened.

Jill, especially, seemed to love the stage, and took every opportunity to

mount it, almost vibrating with her infectious energy.

"Everything's right on schedule," she said happily. "The fruit flies are breeding like mad." (Booo!) "And if I hear that again I'm gonna break out the mosquitoes. Gang, there are things we can live without, but we don't know what they are yet. Chances are we'll be raising the sharks sooner or later. We've been lucky so far. Really lucky." She cleared her throat dramatically. "And speaking of luck, we have Chris with some good news for the farmers, and bad news for the sunbathers. Chris?"

There was scattered applause, most vigorously from Chris' tiny wife Angie.

He walked to the lectern and adjusted the microphone before speaking.

"We, uh," he took off his glasses, polishing them on his shirt, then replaced them, smiling nervously. "We've been having good weather, people, but there's a storm front moving over the mountains. I think Greg can postpone the irrigation canals for a week, we're going to get plenty wet."

He coughed, and moved the microphone close to his mouth. "June and I are working to program the atmospheric model into the computer. Until we do, weather changes will keep catching us unaware. We have to break down a

fairly complex set of thermo and barometric dynamics into something that can be dealt with systematically-wind speed, humidity, vertical motion, friction, pressure gradients, and a lot of other factors still have to be fed in, but we're making progress. Maybe next year we'll be able to tell you how to dress for the tenth anniversary of Landing Day."

There were derisive snorts and laughter, and Chris was applauded back into his seat.

Jase bounded onto the stage and grabbed the mike. "Any more announcements? No? AU right, then, we all voted on tonight's movie, so no groans, please. Lights?"

The auditorium dimmed. He slipped from the stage and the twin beams of the holo projector flickered onto the screen.

It was a war movie, shot in flat film but optically reconstructed to simulate depth. Doc found it boring. He slipped out during a barrage of cannon fire. He headed to the lab and found Jill there already, using one of the small microscopes.

"Hi hon," he called out, flipping on his desk light. "Working late?"

"Well, I'm maybe just a wee bit more bugged than I let on. Just a little."

"About what?"

"I keep thinking that one day we'll find out that we left something out of our tame ecology. It's just a feeling, but it won't go away."

"Like going on vacation," Doc said, deliberately flippant. "You know you forgot something. You'd just rather it was your toothbrush and not your passport."

She smeared a cover glass over a drop of fluid on a slide and set it to dry. "Yes, it feels like that."

"Do you really have mosquitoes in storage?"

She twinkled and nodded. "Yep. Hornets too."

"Just how good is it going? You know how impatient everyone is."

"No real problems. There sure as hell might have been, but thanks to my superior planning" she stuck out her tongue at Doc's grimace. "We'll have food for ourselves and all the children we can raise. I've been getting a little impatient myself, you know? As if there's a part of me that isn't functioning at full efficiency."

Doc laughed. "Then I think you'd better tell Greg."

"I'll do better. I'll announce it tonight and let all the fathers-to-be catch the tidings in one shot."

"Oh boy."

"What?"

"No, it has to be done that way. I know it. I'm just thinking about nine months from now. Oh boy."

So it was announced that evening. As Doc might have expected, someone had already cheated. Somehow Nat, the midwestern earthmother blond, had taken a contraceptive pill and, even with Doc watching, had avoided swallowing it. Doc was fairly sure that her husband

Brew knew nothing of it, although she was already more than four months along when she confessed.

Nat had jumped the gun, and there wasn't a woman on Ridgeback who didn't envy her. A year and eleven months after Landing Day, Doc delivered Ridgeback's first baby.

Sleepy, exhausted by her hours of labor, Nat looked at her baby with a pride that was only half maternal. Her face was flushed, yellow hair tangled in mats with perspiration and fatigue. She held her baby, swaddled in blankets, at her side. "I can hear them outside. What do they want?" she asked drowsily, fighting to keep her eyelids open.

Doc breathed deeply. Ridiculous, but the scentless air of Ridgeback seemed a little sweeter. "They're waiting for a glimpse of the little crown princess."

"Well, she's staying here. Tell them she's beautiful," Ridgeback's first mother whispered, and dropped off to sleep.

Doc washed his hands and dried them on a towel. He stood above the slumbering pair, considering. Then he gently pried the baby from her mother's grip and took her in his arms. Half-conscious mother's wish or no, the infant must be shown to the colony before they could rest. Especially Brew. He could see the Swede's great broad hands knotting into

nervous fists as he waited outside. And the rest of them in a half-crescent around the door; and the inevitable Cynn timer and Roy with their holotape cameras.

"It's a girl," he told them. "Nat's resting comfortably." The baby was red as a tomato and looked as fragile as Venetian glass. She and Doc posed for the camera, then Doc left her with Brew to make a short speech.

Elise and Greg, Jill's husband, had both had paramedic training. Doc set up a rotating eight-hour schedule for the three of them, starting with Elise. The group outside was breaking up as he left, but he managed to catch Jase.

"I'd like to be taken off work duties for a while," he told the colony leader, when the two were alone.

Jase gripped his arm. "Something's wrong with the baby?" There was a volume of concern in the question.

"I doubt it, but she is the first, and I want to watch her and Nat. Most of the women are pregnant now. I want to keep an eye on them, too."

"You're not worried about anything specific?"

When Elise left her shift at the maternity ward, she found him staring at the stone ceiling. She asked, "Insomnia again?"

Shall I get a 'russian sleep' set?"

She studied his face. "The baby?"

She'd seen it too, then. "You just left the baby. She's fine, isn't she?"

"They're both fine. Sleeping. Harry?"
She was the only one who called him that. "What is it?"

"No, nothing's bothering me. You know everything I know. It's just that . .

"Well?"

"It's just that I want to do everything right. This is so important. So I keep checking back on myself, because there's

no one I can call in to check my work. Can you understand what I'm getting at?"

She pursed her lips. Then said, "I know that the only baby in the world could get a lot more attention than she needs. There shouldn't be too many people around her, and they should all be smiling. That's important to a baby."

Doc watched as she took off her clothes and got into bed. The slight swell of her pregnancy was just beginning to show. Within six months there would be nine more children on Ridgeback, and one would be theirs.

Predictably, Brew's and Nat's daughter became Eve.

It seemed nobody but Doc had noticed anything odd about Eve. Even laymen know better than to expect a newborn child to be pretty. A baby Doesn't begin to look like a baby until it is weeks old. The cherubs of the Renaissance paintings of Foucquet or Conegliano were taken from two year-olds. Naturally Eve looked odd, and most of the colony, who had never seen newborn children, took it in their stride. . .

But Doc worried.

The ship's library was a world's library. It was more comprehensive, and held more microfilm and holographically encoded information than any single library on earth. Doc spent weeks

running through medical tapes, and got no satisfaction thereby.

Eve wasn't sick. She was a "good baby"; she gave no more trouble than usual, and no less. Nat had no difficulty nursing her, which was good, as there were no adult cows available on Ridgeback.

Doc pulled a microfisch chip out of the viewer and yawned irritably. The last few weeks had cost him his adjustment to Ridgeback time, and gained him . . . well, a kind of general education in pediatrics. There was nothing specific to look for, no handle on the problem.

Bluntly put, Eve was an ugly baby.

There was nothing more to say, and nothing to do but wait.

Roy and Cynn timer showed their tapes for the year. Cynn timer had a good eye for detail. Until he watched the camera view trucking from the landing craft past the line of houses on Main Street, to Brew, to a closeup of Brew's house, Doc had never noticed how Brew's house reflected Brew himself. It was designed like the others: tall and squarish, with a sloped roof and small window. But the stones in Brew's house were twice the size of those in Doc's house. Brew was proud of his strength.

Roy was in orbit on Year Day, but Cynn timer stayed to cover the festivities,

such as they were. Earth's hypothetical eager audience staff hadn't seen Year Day One. Jase spoke for the camera, comparing the celebration with the first Thanksgiving Day in New England. He was right: it was a feast, a display of the variety of foods Ridgeback was now producing, and not much more than that.

His wife June sang a nondenominational hymn, and they all followed along, each in his own key. Nat fed Eve a bit of corncake and fruit juice, and the colonists applauded Eve's gurgling smile.

The folks back on Earth might not have thought it very exciting, but to the

Ridgebackers it meant everything. This was food they had grown themselves. All of them had bruises or blisters or calluses from weeding or harvesting. They were more than a community now, they were a world, and the fresh fruit and vegetables, and the hot breads, tasted better than anything they could have imagined.

Six months after the birth of Eve, Doc was sure. There was a problem.

The children of Ridgeback totaled seven. Two of the women had miscarried, fewer than he might have feared, and without complications. Jill was still carrying hers, and Doc was beginning to wonder; but it wasn't

serious yet. Jill was big and strong with wide hips and a deep bust. Even now Greg was hard put to keep her from commandeering one of the little flyers and jouncing off to the coastline to check the soil, or inland to supervise the fresh water fish preserve. Give her another week .

The night Elise had delivered their child, it had been special. She had had a dry birth, with the water sack rupturing too early, and Doc had had to use a lubrication device. Elise was conscious during the entire delivery, eschewing painkillers for the total experience of her first birth. She delivered safely, for which Doc had given silent thanks. His

nerves were scraped to super-sensitivity, and he found himself just sitting and holding her hand, whispering affection and encouragement to her, while Greg did much of the work. With Elise's approval he named their son Gerald, shortened to Jerry. Jerry was three weeks old now, healthy and squalling, with a ferocious grip in his tiny hands.

But even a father's pride could not entirely hide the squarish jawline, the eyes, the .

All the children had it, all the six recent ones. And Eve hadn't lost it. Doc continued his research in the micro library, switching from pediatrics to

genetics. He had a microscope and an electron microscope, worth their hundreds of thousands of dollars in transportation costs; he had scrapings of his own flesh and Eve's and Jerry's. What he lacked was a Nobel Prize geneticist to stand behind his shoulder and point out what were significant deviations as opposed to his own poor slide preparation techniques.

He caught Brew looking at him at mealtimes, as though trying to raise the nerve to speak. Soon the big man would break through his inhibitions, Doc could see it coming. Or perhaps Nat would broach the question. Her eldest brother had been retarded, and Doc knew she

was sensitive about it. How long could it be before that pain rose to the surface?

And what would he say to them then?

It was not a mutation. One could hardly expect the same mutation to hit all of seven couples in the same way.

It was no disease. The children were phenomenally healthy.

So Doc worked late into the night, sometimes wearing a black scowl as he retraced dead ends. He needed advice, and advice was 11.9 light years away. Was he seeing banshees? Nobody else had noticed anything. Naturally not; the children all looked normal, for they all

looked alike. Only Brew seemed disturbed. Hell, it was probably Doc that was worrying Brew, just as it was Doc that worried Elise. He ought to spend more time with Elise and Jerry.

Jill lost her baby. It was stillborn, pitiful in its frailty. Jill turned to Greg as the dirt showered down on the cloth that covered her child, biting her lip savagely, trying to stop the tears. She and her husband held each other for a long moment, then, with the rest of the colonists, they walked back to the dwellings.

The colonists had voted early, and unanimously, to give up coffins on Ridgeback. Humans who died here

would give their bodies to the conquest of the planet. Doc wondered if a coffin would have made this ceremony easier, more comforting in its tradition. Probably not, he thought. Dead is dead.

Doc went home with Elise. He'd been spending more time there lately, and less time with the microscopes. Jerry was crawling now, and he crawled everywhere; you had to watch him like a hawk. He could pick his parents unerringly out of a crowd of adults, and he would scamper across the floor, cooing, his eyes alight. . . his deepset brown eyes.

It was a week later that Jase came to

him. After eight hours of labor June had finally released her burden. For a newborn infant the body was big and strong, though in any normal context he was a fragile, precious thing. As father, Jase was entitled to see him first. He looked down at his son and said, "He's just like the others." His eyes and his voice were hollow, and at that moment Doc could no longer see the jovial colony leader who called square-dances at the weekly hoedown.

"Of course he is."

"Look, don't con me, Doc. I was eight when Cynnie was born. She didn't look like any of them. And she never looked like Eve."

"Don't you think that's for me to say?"

"Yes. And damned quick!"

Doc rubbed his jaw, considering. If he was honest with himself he had to admit he ached to talk to somebody. "Let's make it tomorrow. In the ship's library."

Jase's strong hand gripped his arm. "Now."

"Tomorrow, Jase. I've got a lot to say, and there are things in the library you ought to see."

"Here," he said, dialing swiftly. A page appeared on the screen, three-quarters

illustration, and one-quarter print to explain it. "Notice the head? And the hands. Eve's fingers are longer than that. Her forehead slopes more. But look at these." He conjured up a series of growth states paired with silhouettes of bone structure.

"She's maturing much faster than normal."

"At first I didn't think anything about the head. Any infant's head is distorted during passage from the uterus. It goes back to normal if the birth wasn't difficult. And you can't tell much from the features; all babies look pretty much alike. But the hands and arms bothered me."

"And now?"

"See for yourself Her face is too big and her skull is too small and too flat. And I don't like the jaw, or the thin lips." Doc rubbed his eyes wearily. "And there's the hair. That much hair isn't unheard of at that age, but taken with everything else . . . you can see why I was worried."

"And all the kids look just like her. Even Jase Junior."

"Even Jerry. And Jill's stillbirth."

In the ship's library there was a silence as of mourning.

Jase said, "We'll have to tell Earth. The colony is a failure."

Doc shook his head. "We'd better see how it develops first."

"We can't have normal children, Doc."

"I'm not ready to give up, Jase. And if it's true, we can't go back to Earth, either."

"What? Why?"

"This thing isn't a mutation. Not in us, it can't be. What it could be is a virus replacing some of the genes. A virus is a lot like a free-floating chromosome anyway. If we've got a disease that

keeps us from having normal children-"

"That's stupid. A virus here, waiting for us, where there's nothing for it to live on but plankton? You-"

"No, no, no. It had to come with us. Something like the common cold could have mutated aboard ship. There was enough radiation outside the shielding. Someone sneezes in the airlock before he puts his helmet on. A year later someone else inhales the mutant."

Jase thought it through. "We can't take it back to Earth."

"Right. So what's the hurry? It'd be twenty-four years before they could

answer a cry for help. Let's take our time and find out what we've really got."

"Doc, in God's name, what can we tell the others?"

"Nothing yet. When the time comes I'll tell them."

Those few months were a busy time for Ridgeback's doctor. Then they were over. The children were growing, and most of the women were pregnant, including Angie and Jill, who had both had miscarriages. Never again would all the women of Ridgeback be having children in one ear shattering population explosion.

Now there was little work for Doc. He spoke to Jase, who put him on the labor routines. Most of the work was agricultural, with the heavy jobs handled by machines. Robot trucks, trailing plows, scored rectangular patterns across the land.

The fenced bay was rich in Earthborn plankton, and now there were larger forms to eat the plankton. Occasionally Greg opened the filter to let discolored water spread out into the world, contaminating the ocean.

At night the colonists watched news from Earth, 11.9 years in transit, and up to a year older before Roy boarded the starship to beam it down. They strung the

program out over the year in hour segments to make it last longer. There were no wars in progress, to speak of; the Procyon colony project had been abandoned; Macrostructures Inc. was still trying to build an interstellar ramjet. It all seemed very distant.

Jase came whistling into Doc's lab, but backed out swiftly when he saw that he had interrupted a counseling session with Cynn timer and Roy. Doc was the closest thing the colony had to a marriage therapist. Jase waited outside until the pair had left, then trotted in.

"Rough day?"

"Yeah. Jase, Roy and Cynn timer don't fight,

do they?"

"They never did. They're like twins. Married people do get to be like each other, but those two overdo it sometimes."

"I knew it. There's something wrong, but it's not between them." Doc rubbed his eyes on his sleeve. "They were sounding me out, trying to get me talking about the children without admitting they're scared. Anyway what's up?"

Jase brought his hands from behind his back. He had two bamboo poles rigged for fishing. "What say we exercise our manly prerogatives?"

"Ye gods! In our private spawning ground?"

"Why not? It's big enough. There are enough fish. And we can't let the surplus go; they'd starve. It's a big ocean."

By now the cultivated strip of topsoil led tens of miles north and south along the continent. Jill claimed that life would spread faster that way, outward from the edges of the strip. The colony was raising its own chicken eggs and fruit and vegetables. On Landing Day they'd been the first in generations to taste moa meat, whose rich flavor had come that close to making the New Zealand bird extinct. Why shouldn't they catch their own fish?

They made a full weekend of it. They hauled a prefab with them on the flyer and set it up on the barren shore. For three days they fished with the springy bamboo poles. The fish were eager and trusting. They ate some of their catch, and stored the rest for later.

On the last day Jase said, "I kept waiting to see you lose some of that uptight look. You finally have, a little, I think."

"Yeah. I'm glad this happened, Jase."

"Okay. What about the children?"

He didn't need to elaborate. Doc said, "They'll never be normal."

"Then what are they?"

"I dunno. How do you tell people who came twelve light years to build a world that their heirs will be . . ." he groped for words. "Whatever. Changed. Animals."

"Christ. What a mess."

"Give me time to tell Elise. . . if she hasn't guessed by now. Maybe she has."

"How long?"

"A week, maybe. Give us time to be off with Jerry. Might make it easier if we're with him."

"Or harder."

"Yeah, there's that." He cast his line out again. "Anyway, she'll keep the secret, and she'd never forgive me if I didn't tell her first. And you'd better tell June the night before I make the big announcement." The words seemed to catch in his throat and he hung his head, miserable.

Tentatively Jase said, "It's absolutely nobody's fault."

"Oh, sure. I was just thinking about the last really big announcement I helped to make. Years ago. Seems funny now, Doesn't it? 'It's safe, people. You can start dreaming now. Go ahead and have

those babies, folks. It's all right . . ." His voice trailed off and he looked to Jase in guilty confusion. "What could I do, Jase? It's like thalidomide. In the beginning, it all looked so wonderful."

Jase was silent, listening to the sound of water lapping against the boat. "I just hate to tell Earth, that's all," he finally said in a low voice. "It'll be like giving up. Even if we solve this thing, they'd never risk sending another ship."

"But we've got to warn them."

"Doc, what's happening to us?"

"I don't know."

"How hard have you-no, never mind." Jase pulled his line in, baited it and sent it whipping out again. Long silences are in order when men talk and fish.

"Jase, I'd give anything I have to know the answer. Some of the genes look different in the electron microscope. Maybe. Hell, it's all really too fuzzy to tell, and I don't really know what it means anyway. None of my training anticipated anything like this. You try to think of something."

"Alien invasion."

Pause. "Oh, really?"

Jase's line jumped. He wrestled in a

deep sea bass and freed the hook. He said, "It's the safest, most painless kind of invasion. They find a world they want, but there's an intelligent species in control. So they design a virus that will keep us from bearing intelligent children. After we're gone they move in at their leisure. If they like they can use a counter virus, so the children can bear human beings again for slaves."

The bamboo pole seemed dead in Doc's hands. He said, "That's uglier than anything I've thought of."

"Well?"

"Could be. Insufficient data. If it's true, it's all the more reason to warn Earth.

But Ridgeback is doomed."

Jerry had his mother's hair, sun bleached auburn. He had too much of it. On his narrow forehead it merged with his brows . . . his shelf of brow, and the brown eyes watching from way back. He hardly needed the shorts he was wearing; the hair would have been almost enough. He was nearly three.

He seemed to sense something wrong between his parents. He would spend some minutes scampering through the grove of sapling fruit trees, agile as a child twice his age; then suddenly return to take their hands and try to tug them both into action.

Doc thought of the frozen fertilized eggs of dogs in storage. Jerry with a dog . . . the thought was repulsive. Why? Shouldn't a child have a dog?

"Well, of course I guessed something" Elise said bitterly. "You were always in the library. When you were home, the way that you looked at Jerry . . . and me, come to think of it. I see now why you haven't taken me to bed much lately." She'd been avoiding his eyes, but now she looked full at him. "I do see. But, Harry, couldn't you have asked me for help? I have some medical knowledge, and, and I'm your wife, and Jerry's mother, damn it Harry!"

"Would you believe I didn't want you

worrying?"

"Oh, really? How did it work?"

Her sarcasm cut deep. Bleeding, he said, "Nothing worked."

Jerry came out of the trees at a tottering run. Doc stood up, caught him, swung him around, chased him through the trees . . . came back puffing, smiling, holding his hand. He almost lost the smile, but Elise was smiling back, with some effort. She hugged Jerry, then pulled fried chicken from the picnic basket and offered it around.

She said, "That alien invasion idea is stupid."

"Granted. It'd be easy to think someone has 'done' it to us."

"Haven't you found anything? Isn't there anything I can help with?"

"I've found a lot. All the kids have a lower body temperature, two point seven degrees. They're healthy as horses, but hell, who would they catch measles from? Their brain capacity is too small, and not much of it is frontal lobe. They're hard to toilet train and they should have started babbling, at least, long ago. What counts is the brain, of course."

Elise took one of Jerry's small hands. Jerry crawled into her lap and she

rocked him. "His hands are okay. Human. His eyes . . . are brown, like yours. His cheekbones are like yours, too. High and a little rounded."

Doc tried to smile. "His eyes look a little strange. They're not really slanted enough to suspect mongolism, but I'll bet there's a gene change. But where do I go from there? I can see differences, and they're even consistent, but there's no precedent for the analysis equipment to extrapolate from." Doc looked disgusted. Elise touched his cheek, understanding.

"Can you teach me to use an electron microscope?"

Doc sat at the computer console, watching over Jill's shoulder as she brought out the Orion vehicle's image of Ridgeback. The interstellar spacecraft doubled as a weather eye, and the picture, once drab with browns and grays, now showed strips of green beneath the fragmented cloud cover. If Ridgeback was dead, it certainly didn't show on the screen.

"Well, we've done a fair old job." Jill grinned and took off her headset. Her puffy natural had collected dust and seeds and vegetable fluff until she gave up and shaved it off. The tightly curled mat just covered her scalp now, framing her chocolate cameo features. "The

cultivated strip has spread like weeds. All along the continent now I get CO₂-oxygen exchange. It jumped the ridges last year, and now I get readings on the western side."

"Are you happy?"

"No," she said slowly. "I've done my job. Is it too much to want a child too? I wouldn't care about the . . . problem. I just want . .

"It's nobody's fault," Doc said helplessly.

"I know, I know. But two miscarriages. Couldn't they have known back on Earth? Wasn't there any way to be sure?"

Why did I have to come all this way . . ."

She caught herself and smiled thinly. "I guess I should count my blessings. I'm better off than poor Angie."

"Poor Angie," Doc echoed sadly. How could they have known about Chris? The night Doc announced his conclusions about the children, there had been tears and harsh words, but no violence. But then there was Chris.

Chris, who had wanted a child more than any of them could have known. Who had suffered silently through Angie's first miscarriage, who hoped and prayed for the safe delivery of their second effort.

It had been an easy birth.

And the morning after Doc's speech, the three of them, Chris, Angie and the baby, were found in the quiet of their stone house, the life still ebbing from Chris' eyes and the gaps in his wrists.

"I'm sorry," he said over and over, shaking his head as if he were cold, his watery brown eyes dulling. "I just couldn't take it. I just . . . I just . . ." and he died. The three of them were buried in the cemetery outside of town, without coffins.

The town was different after the deaths, a stifling quiet hanging in the streets. Few colonists ate at the communal meals, choosing to take their suppers at home.

In an effort to bring everyone together, Jase encouraged them to come to town hall for Movie Night.

The film was "The Sound of Music." The screen erupted with sound and color, dazzling green Alps and snow-crested mountains, happy song and the smiling faces of normal, healthy children.

Half the colonists walked out.

Most of the women took contraceptives now, except those who chose not to tamper with their estrogen balance. For these, Doc performed painless menstrual extractions bimonthly.

Nat and Elise insisted on having more children. Maybe the problem only affected the firstborn, they argued. Doc fought the idea at first. He found himself combating Brew's sullen withdrawal, Nat's frantic insistence, and a core of hot anger in his own wife.

Earth could find a cure. It was possible. Then their grandchildren would be normal again, the heirs to a world.

He gave in.

But all the children were the same. In the end, Nat alone had not given up. She had borne five children, and was carrying her sixth.

The message of failure was halfway to Earth, but any reply was still nineteen years away. Doc had adapted the habit of talking things over with Jase, hoping that he would catch some glimpse of a solution.

"I still think it's a disease," he told Jase, who had heard that before, but didn't mention it. The bay was quiet and their lines were still. They talked only during fishing trips. They didn't want the rest of the colony brooding any more than they already were. "A mutant virus. But I've been wondering, could the changes have screwed us up? A shorter day, a longer year, a little heavier gravity. Different air mixture. No common cold, no

mosquito bites; even that could be the key."

On a night like this, in air this clear, you could even see starglades casting streaks across the water. A fish jumped far across the bay, and phosphorescence lit that patch of water for a moment. The Orion vehicle, mace-shaped, rose out of the west, past the blaze of the Pleiades. Roy would be rendezvousing with it now, preparing for tomorrow's Year Day celebration.

Jase seemed to need these trips even more than Doc. After the murders the life seemed to have gone out of him, only flashes of his personality coming through at tranquil times like these. He asked,

"Are you going to have Jill breed mosquitoes?"

Yes."

"I think you're reaching. Weren't you looking at the genes in the cytoplasm?"

"Yeah. Elise's idea, and it was a good one. I'd forgotten there were genes outside the cell nucleus. They control the big things, you know: not the shape of your fingers, but how many you get, and where. But they're hard to find, Jase. And maybe we found some differences between our genes and the children's, but even the computer Doesn't know what the difference means."

"Mosquitoes." Jase shook his head. "We know there's a fish down that way. Shall we go after him?"

"We've got enough. Have to be home by morning. Year Day."

"What exactly are we celebrating this time?"

"Hell, you're the mayor. You think of something." Doc sulked, watching the water ripple around his float. "Jase, we can't give up-"

Jase's face was slack with horror, eyes east up to the sky. Doc followed his gaze, to where a flaring light blossomed behind the Orion spacecraft.

"Oh my God," Jase rasped, "Roy's up there."

Throwing his bamboo pole in the water, Jase started the engine and raced for shore.

Doc studied the readouts carefully. "Mother of God," he whispered. "How many engines did he fire?"

"Six." Jill's eyes were glued to the screen, her voice flat. "If he was aboard, he . . . well, there isn't much chance he survived the acceleration. Most of the equipment up there must be junk now."

"But what if he did survive? Is there a chance?"

"I don't know. Roy was getting set to beam the messages down, but said that he had an alarm to handle first. He went away for a while, and ." she seemed to search for words. She whispered, "Boom."

"If he was outside the ship, in one of the little rocket sleds, he could get to the shuttle vehicle."

Jase walked heavily into the lab.

"What about Cynn timer? What did she say?" Doc asked quickly.

Jase's face was blank of emotion. "She talked to him before the accident."

"And?"

"It's all she would say. I'm afraid she took it pretty bad. This was sort of the final straw." His eyes were hollow as he reminisced. "She was always a brave kid, you know? Anything I could do, she'd be right behind me, measuring up to big brother. There's just a limit, that's all. There's just a limit."

Doc's voice was firm, only a slight edge of unease breaking through his control. "I think we had better face it. Roy is dead. The Orion's ruined, and the shuttle-craft is gone anyway."

"He could be alive . . ." Jifi ventured.

Doc tried to take the sting out of his voice, and was not entirely successful. "Where? On the ship, crushed to a paste? Not on the shuttle. It's tumbling further from the Orion every second. There's no one on it. In one of the rocket sleds?" His face softened, and they could see that he was afraid to have hope. "Yes. Maybe that. Maybe on one of the sleds."

They nodded to each other, and they and the other colonists spent long hours on the telescope hoping, and praying.

But there was nothing alive up there now. Ridgeback was entirely alone.

Cynnie never recovered. She would talk only to her brother, refusing even to see

her child. She was morose and ate little, spending most of her time watching the sky with something like terrified awe in her eyes.

And one day, seven months after the accident, she walked into the woods and never returned.

Doc hadn't seen Jerry for three weeks.

The children lived in a community complex which had some of the aspects of a boarding school. The colonists took turns at nursing duty. Jill spent most of her time there since she and Greg were on the outs. Lately,

Elise had taken up the habit too. Not that

he blamed her; he couldn't have been very good company the last few months.

Parents took their children out to the T-shaped complex whenever they felt like it, so that some of the children had more freedom than others. But by and large they all were expected to live there eventually.

Brew was coming out of the woods with a group of six children when Doc stumbled out into the sunlight and saw Jerry.

He wore a rough pair of coveralls that fit him well enough, but he would have looked ludicrous if there had been anything to laugh about. Soft brown fur

covered every inch of him. As Doc appeared he turned his head with a bird-quick movement, saw his father, and scampered over. Jerry bounced into him, wrapped long arms tight about his rib cage and said, eagerly, "Daddy."

There was a slight pause.

"Hello, Jerry." Doc slowly bent to the ground, looking into his son's eyes.

"Daddy Doc, Daddy Doc," he chattered, smiling up at his father. His vocabulary was about fifteen words. Jerry was six years old and much too big for his age. His fingers were very long and strong, but his thumbs were small and short and inconsequential. Doc had seen him

handle silverware without much trouble. His nose pugged, jaw massive with a receding chin. There were white markings in the fur around his eyes, accentuating the heavy supra orbital ridges, making the poor child look like- The poor child. Doc snorted with self-contempt. Listen to me. Why not my child?

Because I'm ashamed. Because we lock our children away to ease the pain. Because they look like- Doc gently disengaged Jerry's fingers from his shirt, turned and half-ran back to the ship. Shivering, he curled up on one of the cots and cursed himself to sleep.

Hours later he roused himself and,

woozy with fatigue, he went looking for Jase. He found him on a work detail in the north fields, picking fruit.

"I'm not sure," he told Jase. "They're not old enough for me to be sure. But I want your opinion."

"Show me," said Jase, and followed him to the library.

The picture on the tape was an artist's rendering of *Pithecanthropus erectus*. He stood on a grassy knoll looking warily out at the viewer, his long-fingered hand clutching a sharp-edged throwing rock.

"I'll smack your head," said Jase.

"I'm wrong, then?"

"You're calling them apes!"

"I'm not. Read the copy. Pithecanthropus was a small-brained Pleistocene primate, thought to be a transitional stage between ape and man.

You got that? Pith is also called Java Man."

Jase glared at the reader. "The markings are different. And there is the fur-

"Forget 'em. They're nothing but guesswork. All the artist had to go on were crumbling bones and some broken rocks."

"Broken rocks?"

"Pith used to break rocks in half to get an edged weapon. It was about the extent of his tool-making ability. All we know about what he looked like comes from fossilized bones-very much like the skeleton of a stoop shouldered man with foot trouble, topped with the skull of an ape with hydrocephalus."

"Very nice. Will Eve's children be fish?"

"I don't know, dammit. I don't know anything at all. Look, Pith isn't the only candidate for missing link. Homo Habilis looked a lot more like us and lived about two million years ago. Kenyapithicus Africanus resembled us

less, but lived eighteen million years earlier. So I can't say what we've got here. God only knows what the next generation will be like. That depends on whether the children are moving backwards or maybe sideways. I don't know, Jase, I just don't know!" The last words were shrill, and Doc punctuated them by slamming his fist against a wire window screen. Then, because he could think of nothing more to say, he did it again. And again. And- Jase caught his arm. Three knuckles were torn and bleeding. "Get some sleep," he said, eyes sad. "I'll have them send Earth a description of Eve the way she is now. She's oldest, and best developed. We'll send them all we have on her. It's all we

can do."

Momentum and the thoroughness of their training had kept them going for eight years. Now the work of making a world slowed and stopped.

It didn't matter. The crops and the meat animals had no natural enemies on Ridgeback. Life spread along the continent like a green plague.

Already it had touched some of the islands.

Doc was gathering fruit in the groves. It was a shady place, cool, quiet, and it made for a tranquil day's work. There was no set quota. You took home

approximately a third of what you gathered. Sometimes he worked there, and sometimes he helped with the cattle, examining for health and pregnancy, or herding the animals with the nonlethal sonic stunners.

He wished that Elise were here with him, so they could laugh together, but that was growing infrequent now. She was growing more involved with the nursery, and he spent little of his time there.

Jill's voice hailed him from the bottom of the ladder. "Hey up there, Doc. How about a break?"

He grinned and climbed down, hauling a

sack of oranges.

"Tired of spending the day reading, I guess," she said lightly. She offered him an apple. He polished it on his shirt and took a bite. "Just needed to talk to somebody."

"Kinda depressed?"

"Oh, I don't know. I guess it's just getting hard to cope with some of the problems."

"I guess there have been a few."

Jill gave a derisive chuckle. "I sure don't know Greg anymore. Ever since he set up the brewery and the distillery, he

Doesn't really want to see me at all."

"Don't take it so hard," Doc comforted. "The strain is showing on all of us. Half the town Docs little more than read or play tapes or drink. Personally, I'd like to know who smuggled the hemp seeds on board."

Jill laughed, which he was glad for, then her face grew serious again. "You know, there'd probably be more trouble if we didn't need someone to look after the kids." She paused, looking up at Doc. "I spend a lot of my time there," she said unnecessarily.

"Why?" It was the first time he'd asked. They had left the groves and were

heading back into town along the gravel road that Greg and Brew and the others had built in better days.

"We . . . I came here for a reason. To continue the human race, to cross a new frontier, one that my children could have a part in. Now, now that we know that the colony is doomed, there's just no motive to anything. No reason. I'm surprised that there isn't more drinking, more carousing and foursomes and divorces and everything else. Nothing seems to matter a whole lot. Nothing at all."

Doc took her by the shoulders and held her. Go on and cry, he silently said to her. God, I'm tired.

The children grew fast. At nine Eve reached puberty and seemed to shoot skyward. She grew more hair. She learned more words, but not many more. She spent much of her time in the trees in the children's complex. The older girls grew almost as fast as she did, and the boys.

Every Saturday Brew and Nat took some of the children walking. Sometimes they climbed the foothills at the base of the continental range; sometimes they wandered through the woods, spending most of their efforts keeping the kids from disappearing into the trees.

One Saturday they returned early, their

faces frozen in anger. Eve and Jerry were missing. At first they refused to discuss it, but when Jase began organizing a search party, they talked.

They'd been ready to turn for home when Eve suddenly scampered into the trees. Jerry gave a whoop and followed her. Nat had left the others with Brew while she followed after the refugees.

It proved easy to find them, and easier still to determine what they were doing with each other when she came upon them.

Eve looked up at Nat, innocent eyes glazed with pleasure. Nat trembled for a moment, horrified, then drove them both

away with a stick, screaming filth at them.

Over Nat's vehement objections and Brew's stony refusal to join, Jase got his search party together and set off. They met the children coming home. By that time Nat had talked to the other mothers and fathers at the children's complex.

Jase called a meeting. There was no way to avoid it now, feelings were running too deep.

"We may as well decide now," he told them that night. "There's no question of the children marrying. We could train them to mouth the words of any of our religions, but we couldn't expect them to

understand what they were saying. So the question is, shall we let the children reproduce?"

He faced an embarrassed silence.

"There's no question of their being too young. In biological terms they aren't, or you could all go home. In our terms, they'll never be old enough. Anyone have anything to say?"

"Let's have Doc's opinion," a hoarse voice called. There was a trickle of supportive applause.

Doc rose, feeling very heavy. "Fellow colonists . . ." The smile he was trying on for size didn't fit his face. He let it

drop. There was a desperate compassion in his voice. "This world will never be habitable to mankind until we find out what went wrong here. I say let our children breed. Someday someone on Earth may find out how to cure what we've caught. Maybe he'll know how to let our descendants breed men again. Maybe this problem will only last a generation or two, then we'll get human babies again. If not, well, what have we lost? Who else is there to inherit Ridgeback?"

"No!" The sound was a tortured meld of hatred and venom. That was Nat, loving mother of six, with her face a strained mask of frustration. "I didn't risk my life

and leave my family and, and train for years and bleed and sweat and toil so my labor could fall to. . . to... a bunch of goddamned monkeys!"

Brew pulled her back to her seat, but by now the crowd was muttering and arguing to itself. The noise grew louder. There was shouting. The yelling, too, grew in intensity.

Jase shouted over the throng. "Let's talk this out peacefully!"

Brew was standing, screaming at the people who disagreed with him and Natalie. Now it was becoming a shoving match, and Brew was getting more furious.

Doc pushed his way into the crowd, hoping to reach Brew and calm him. The room was beginning to break down into tangled knots of angry, emotionally charged people.

He grabbed the big man's arm and tried to speak, but the Swede turned bright baleful eyes on him and swung a heavy fist.

Doc felt pain explode in his jaw and tasted blood. He fell to the ground and was helped up again, Brew standing over him challengingly. "Stay out of our lives, Doctor," he sneered, openly now. "You've never helped anything before. Don't try to start now."

He tried to speak but felt the pain, and knew his jaw was fractured. A soft hand took his arm and he turned to see Elise, big green eyes luminous with pity and fear. Without struggling, he allowed her to take him to the ship infirmary.

As they left the auditorium he could hear the shouting and struggling, Jase on the microphone trying to calm them, and the coldly murderous voices that screamed for "no monkey Grandchildren."

He tried to turn his head towards the distant sound of argument as Elise set the bone and injected quick-healing serums. She took his face and kissed him softly, with more affection than she had shown in months, and said, "They're afraid,

Harry." Then kissed him again, and led him home.

Doc raged inwardly at his jaw that week. Its pain prevented him from joining in the debate which now flared in every corner of the colony.

Light images swam across his closed eyes as the sound of fists pounding against wood roused him from dreamless sleep. Doc threw on a robe and padded barefoot across the cool stone floor of his house, peering at the front door with distaste before opening it. Jase was there, and some of the others, somber and implacable in the morning's cool light.

"We've decided, Doc," Jase said at last. Doc sensed what was coming.

"The children are not to breed. I'm sorry, I know how you feel-" Doc grunted. How could Jase know how he felt when he wasn't sure himself? "We're going to have to ask you to perform the sterilizations . . ." Doc's hearing faded down to a low fuzz, and he barely heard the words. This is the way the world ends. .

Jase looked at his friend, feeling the distaste between them grow. "All right. We'll give you a week to change your mind. If not, Elise or Greg will have to do it." Without saying anything more they left.

Doc moped around that morning, even though Elise swore to him that she'd never do it. She fussed over him as they fixed breakfast in the kitchen. The gas stove burned methane reclaimed from waste products, the flame giving more heat control than the microwaves some of the others had. Normally Doc enjoyed scrambling eggs and working fresh slivered vegetables into crisp perfection, but nothing she said or did seemed to lift him out of his mood.

He ate lightly, then got dressed and left the house. Although she was concerned, Elise did not follow him.

He went out to the distillery, where Greg

spent much of his time under the sun, drunk and playing at being happy. "Would you?" The pain still muffled Doc's words. "Would you sterilize them?"

Greg looked at him blearily, still hung over from the previous evening's alcoholic orgy. "You don't understand, man." There was a stirring sound from the sheltered bedroom behind the distillery, and a woman's waking groan. Doc knew it wasn't Jifi. "You just don't understand."

Doc sat down, wishing he had the nerve to ask for a drink. "Maybe I don't. Do you?"

"No. No, I don't. So I'll follow the herd. I'm a builder. I build roads, and I build houses. I'll leave the moralizing to you big brains."

Doc tried to say something and found that no words would come. He needed something. He needed .

"Here, Doc. You know you want it." Greg handed him a canister with a straw in it. "Best damn vodka in the world." He paused, and the slur dropped from his voice. "And this is the world, Doc. For us. For the rest of our lives. You've just got to learn to roll with it." He smiled again and mixed himself an evil-looking drink.

Greg's guest had evidently roused herself and dressed. Doc could hear her now, singing a snatch of song as she left. He didn't want to recognize the voice.

"Got any orange juice?" Doc mumbled, after sipping the vodka.

Greg tossed him an orange. "A real man works for his pleasures."

Doc laughed and took another sip of the burning fluid. "Good lord. What is that mess you're drinking?"

"It's a Black Samurai. Sake and soy sauce."

Doc choked. "How can you drink that?"

"Variety, my friend. The stimulation of the bizarre."

Doc was silent for a long time. Senses swimming he watched the sun climb, feeling the warmth as morning melted into afternoon. He downed a slug of his third screwdriver and said irritably, "You can't do it, Greg. If you sterilize the children, it's over."

"So what? It's over anyway. If they wanna let a drunk slit the pee pees of their . . . shall we say atavistic progeny? Yeah, that sounds nice. Well, if they want me to do it, I guess I'll have to do it." He looked at Doc very carefully. "I do have my sense of civic duty. How about you, Doc?"

"I tried." He mumbled, feeling the liquor burning his throat, feeling the light-headedness exert its pull. "I tried. And I've failed."

"You've failed so far. What were your goals?"

"To keep.-" he took a drink. Damn, that felt good. "To keep the colony healthy. That's what. It's a disaster. We're at each other's throats. We kill our babies-"

Doc lowered his head, unable to continue.

They were both silent, then Greg said, "If I've gotta do it, I will, Doc. If it's not

me, it'll be someone else who reads a couple of medical texts and wants to play doctor. I'm sorry."

Doc sat, thinking. His hands were shaking. "I can't do that." He couldn't even feel the pain anymore.

"Then do what you gotta do, man," and Greg's voice was dead sober.

"Will you . . . can you help me?" Doc bit his lip. "This is my civic duty, you know?"

"Yea, I know." He shook his head. "I'm sorry. I wish I could help."

A few minutes passed, then Doc said

drunkenly, "There's got to be a way. There just has to be."

"Wish I could help, Doc."

"I wish you could too," Doc said sincerely, then rose and staggered back to his house.

It rained the night he made his decision, one of the quick, hot rains that swept from the coast to the mountains in a thunderclap of fury. It would make a perfect cover.

He gathered his medical texts, a Bible and a few other books, regretting that most of the information available to him was electronically encoded. Doc took

one of the silent stunners from the armory. The non lethal weapons had only been used as livestock controllers. There had never been another need, until now. From the infirmary he took a portable medical kit, stocking it with extra bandages and medicine, then took it all to the big cargo flyer.

It was collapsible, with a fabric fuselage held rigid by highly compressed air in fabric structural tubing. He put it in one of the soundless electric trucks and inflated it behind the children's complex.

There was plenty of room inside the fence for building and for a huge playground with fruit trees and all the immemorial toys of the very young. After

the children had learned to operate a latch, Brew had made a lock for the gate and given everyone a key. Doc clicked it open and moved in.

He stayed in the shadows, creeping close to the main desk where Elise worked.

You can't follow where I must go, he thought regretfully. You and I are the only fully trained medical personnel You must stay with the others, I'm sorry, darling.

And he stunned her to sleep silently, moving up to catch her head as it slumped to the table. For the last time, he gently kissed her mouth and her

closed eyes.

The children were in the left wing-one room for each sex, with floors all mattress and no covers, because they could not be taught to use a bed. He sprayed the sound waves up and down the sleeping forms. The parabolic reflector leaked a little, so that his arm was numb to the elbow when he was finished. He shook his hand, trying to get some feeling back into it, then gave up and settled into the hard work of carrying the children to the flyer.

He hustled them through the warm rain, bending under their weight but still working swiftly. Doc arranged them on the fabric floor in positions that looked

comfortable-the positions of sleeping men rather than sleeping animals. For some time he stood looking down at Jerry his son and at Lori his daughter, thinking things he could not afterwards remember.

He flew North. The flyer was slow and not soundless; it must have awakened people, but he'd have some time before anyone realized what had happened.

Where the forest had almost petered out he hovered down and landed gently enough that only a slumbering moan rose from the children. Good. He took half of them, including Jerry and Lori, and spread them out under the trees. After he

had made sure that they had cover from the air he took the other packages, the books and the medical kit, and hid them under a bush a few yards away from the children.

He stole one last look at them, his heirs, small and defenseless, asleep. He could see Elise in them, in the color of their hair, as Elise could see him in their eyes and cheeks.

Kneading his shoulder, he hurried back to the ship. There was more for him to do.

Skipping the ship off again, he cruised thirty miles west, near the stark ridge of mountains, their somber gray still broken

only sparsely by patches of green. There he left the other seven children. Let the two groups develop separately, he thought. They wouldn't starve, and they wouldn't die of exposure, not with the pelts they had grown. Many would remain alive, and free. He hoped Jerry and Lori would be among them.

Doc lifted the flyer off and swept it out to the ocean. Only a quarter mile offshore were the first of the islands, lush now with primitive foliage. They spun beneath him, floating brownish-green upon a still blue sea.

Now he could feel his heartbeat, taste his fear. But there was resolve, too, more certain and calm than any he had

known in his life.

He cut speed and locked the controls, setting the craft on a gradual decline. Shivering already, he pulled on his life jacket and walked to the emergency hatch, screwing it open quickly.

The wind whipped his face, the cutting edge of salt narrowing his eyes. Peering against the wall of air pressure he was able to see the island coming up on him now, looming close. The water was only a hundred feet below him, now eighty, sixty .

The rumbling of the shallow breakers joined with the tearing wind, and, fighting his fear, he waited until the last

possible moment before hurling himself from the doorway.

He remembered falling.

He remembered hitting the water at awful speed, the spray ripping into him, the physical impact like the blow of a great hand. When his head broke surface Doc wheezed for air, swallowed salty liquid and thrashed for balance.

In the distance, he saw the flash of light, and a moment later heard the shattering roar as the flyer spent itself on the rocky shore.

Jase was tired. He was often tired lately, although he still managed to get his work

done.

The fields had only recently become unkempt, as Marlow and Billie and Jill and the others grew more and more inclined to pick their vegetables from their backyard gardens.

So just he and a few more still rode out to the fields on the tractors, still kept close watch on the herds, still did the hand-pruning so necessary to keep the fruit trees healthy.

The children were of some help. Ten years ago a few of them had been captured around the foothill area. They had been sterilized, of course, and taught to weed, and carry firewood, and a few

other simple tasks.

Jase leaned on his staff and watched the shaggy figures moving along the street, sweeping and cleaning.

He had grown old on this world, their Ridgeback. He regretted much that had happened here, especially that night thirty-some years before when Doc had taken the children.

Taken them-where? Some argued for the islands, some for the West side of the mountain range. Some believed that the children had died in the crash of the flyer. Jase had believed that, until the adult Piths were captured. Now, it was hard to say what happened.

It was growing chill now, the streetlights winking on to brighten the long shadows a setting Tau Ceti cast upon the ground. He drew his coat tighter across his shoulders and walked back to his house. It was a lonelier place to be since June had died, but it was still home.

Fumbling with the latch, he pushed the door open and reached around for the light switch. As it flicked on, he froze.

My God.

"Hello, Jase." The figure was tall and spare, clothes ragged, but graying hair and beard cut squarely. Three of the children were with him.

After all this time .

"Doc . . ." Jase said, still unbelieving. "It is you, isn't it?"

The bearded man smiled uncertainly, showing teeth that were white but chipped. "It's been a long time, Jase. A very long time."

The three Piths were quiet and alert, sniffing the air of this strange place.

"Are these-?"

"Yes. Jerry and Lori. And Eve. And a small addition." One of the three-God, could it be Eve? sniffed up to Jase. The soft golden fur on her face was tinged

with gray, but she carried a young child at her breast.

Jerry stood tall for a preman, eyeing Jase warily. He carried a sharpened stick in one knobby hand.

Jase sat down, speechless. He looked up into the burning eyes of the man he had known thirty years before. "You're still officially under a death sentence, you know."

Doc nodded his head. "For kidnapping?"

"Murder. No one was sure what had happened to you, whether you or any of the children had survived."

Doc, too, sat down. For the first time the light in his eyes dimmed. "Yes. We survived. I swam to shore after crashing the flyer, and found the place where I had left the children." He thought for a moment, then asked quietly. "How is Elise? And all the others?"

Jase was unable to raise his eyes from the floor. "She died three years ago, Doc. She was never the same after you left. She thought you were dead. That the children were dead. Couldn't you have at least told her about your plan? Or gotten her a message?"

Doc's fingers played absently with his beard as he shook his head. "I couldn't involve her. I couldn't. Could you . . .

show me where she's buried, Jase?"

"Of course."

"What about the others?"

'Well, none of the people were the same after the children left. Some just seemed to lose purpose. Brew's dead. Greg drank himself under. Four of the others have died." Jase paused, thinking. "Do any of the others know you're here?"

"No. I slipped in just at dusk. I wasn't sure what kind of a reception I'd get."

"I'm still not sure." Jase hesitated. "Why did you do it?"

The room was quiet, save for a scratching sound as Jerry fingered an ear. Fleas? Absurd. Jill had never uncrated them.

"I had to know, Jase," he said. There was no uncertainty in his voice. In fact, there was an imperious quality he had never had in the old days. "The question was: Would they breed true? Was the Pith effect only temporary?"

"Was it?"

"No. It persisted. I had to know if they were regressing or evolving, and they remained the same in subsequent generations, save for natural selection, and there isn't much of that."

Jase watched Lori, her stubby fingers untangling mats in her fur. Her huge brown eyes were alive and vital. She was a lovely creature, he decided. "Doc, what are the children?"

"What do you think?"

"You know what I think. An alien species wants our worlds. In a hundred years they'll land and take them. What they'll do with the children is anybody's guess. I-" He couldn't bring himself to look at Eve. "I wish you'd sterilized them, Doc."

"Maybe you do, Jase. But, you see, I don't believe in your aliens."

Jase's breath froze in his throat.

"They might want our world," said Doc, "but why would they want our life forms? Everything but Man is spreading like a plague of locusts. If someone wants Ridgeback, why haven't they done something about it? By the time they land, terrestrial life will have an unstoppable foothold. Look at all the thousands of years we've been trying to stamp out just one life form, the influenza viruses.

"No, I've got another idea. Do you know what a locust is?"

"I know what they are. I've never seen one."

"As individuals they're something like a short grasshopper. As individuals, they hide or sleep in the daytime and come out at night. In open country you can hear them chirping after dusk, but otherwise nobody notices them. But they're out there, eating and breeding and breeding and eating, getting more numerous over a period of years, until one day there are too many for the environment to produce enough food.

"Then comes the change. On Earth it hasn't happened in a long time because they aren't allowed to get that numerous. But it used to be that when there were enough of them, they'd grow bigger and darker and more aggressive. They'd

come out in the daytime. They'd eat everything in sight, and when all the food was gone, and when there were enough of them, they'd suddenly take off all at once.

"That's when you'd get your plague of locusts. They'd drop from the air in a cloud thick enough and broad enough to darken the sky, and when they landed in a farmer's field he could kiss his crops goodbye. They'd raze it to the soil, then take off again, leaving nothing."

Jase took off his glasses and wiped them. "I don't see what it is you're getting at."

"Why do they do it? Why were locusts

built that way?"

"Evolution, I guess. After the big flight they'd be spread over a lot of territory. I'd say they'd have a much bigger potential food supply."

"Right. Now consider this. Take a biped that's man shaped, enough so to use a tool, but without intelligence. Plant him on a world and watch him grow. Say he's adaptable; say he eventually spread over most of the fertile land masses of the planet. Now what?

"Now an actual physical change takes place. The brain expands. The body hair drops away. Evolution had adapted him to his climate, but that was when he had

hair. Now he's got to use his intelligence to keep from freezing to death. He'll discover fire. He'll move out into areas he couldn't live in before. Eventually he'll cover the whole planet, and he'll build spacecraft and head for the stars."

Jase shook his head. "But why would they change hoc/c Doc?"

"Something in the genes, maybe. Something that didn't mutate."

"Not how, Doc. We know it's possible. Why?"

"We're going back to being grasshoppers. Maybe we've reached our evolutionary peak. Natural selection

stops when we start protecting the weak ones, instead of allowing those with defective genes to die a natural death."

He paused, smiling. "I mean, look at us, Jase. You walk with a cane now. I haven't been able to read for five years, my eyes have weakened so. And we were the best Earth had to offer; the best minds, the finest bodies. Chris only squeaked by with his glasses because he was such a damn good meteorologist."

Jase's face held a flash of long-forgotten pain. "And I guess they still didn't choose carefully enough."

"No," Doc agreed soberly. "They didn't. On Earth we protected the sick, allowed

them to breed, instead of letting them die . . . with pacemakers, with insulin, artificial kidneys and plastic hip joints and trusses. The mentally ill and retarded fought in the courts for the right to reproduce. Okay, it's humane. Nature isn't humane. The infirm will do their job by dying, and no morality or humane court rulings or medical advances will change the natural course of things for a long, long time."

"How long?"

"I don't know how stable they are. It could be millions of years, or?" Doc shrugged. "We've changed the course of our own development. Perhaps a simpler creature is needed to colonize a world.

Something that has no choice but to change or die. Jase, remember the Cold War?"

"I read about it."

"And the Belt Embargo? Remember diseromide, and smog, and the spray-can thing, and the day the fusion seawater distillery at San Francisco went up and took the Bay area with it, and four states had to have their water flown in for a month?"

"So?"

"A dozen times we could have wiped out all life on Earth. As soon as we've used our intelligence to build spacecraft

and seed another world, intelligence becomes a liability. Some old anthropologist even had a theory that a species needs abstract intelligence before it can prey on its own kind. The development of fire gave Man time to sit back and dream up ways to take things he hadn't earned. You know how gentle the children are, and you can remember how the carefully chosen citizens of Ridgeback acted the night we voted on the children's right to reproduce."

"So you gave that to them, Doc. They are reproducing. And when we're gone they'll spread all over the world. But are they human?"

Doc pondered, wondering what to say.

For many years he had talked only to the children. The children never interrupted, never disagreed . "I had to know that too. Yes. They're human."

Jase looked closely at the man he had called friend so many years ago. Doc was so sure. He didn't discuss; he lectured. Jase felt an alienness in him that was deeper than the mere passage of time.

"Are you going to stay here now?"

"I don't know. The children don't need me anymore, though they've treated me like a god. I can't pass anything on to them. I think our culture has to die before theirs can grow."

Jase fidgeted, uncomfortable. "Doc. Something I've got to tell you. I haven't told anyone. It's thirty years now, and nobody knows but me."

Doc frowned. "Go on."

"Remember the day Roy died? Something in the Orion blew all the motors at once? Well, he talked to Cynnie first. And she talked to me, before she disappeared. Doc, he got a laser message from Earth, and he knew he couldn't ever send it down. It would have destroyed us. So he blew the motors."

Doc waited, listening intently.

"It seems that every child being born on Earth nowadays bears an uncanny resemblance to Pithecanthropus erectus. They were begging us to make the Ridgeback colony work. Because Earth is doomed."

"I'm glad nobody knew that."

Jase nodded. "If intelligence is bad for us, it's bad for Earth. They've fired their starships. Now they're ready for another cycle."

"Most of them'll die. They're too crowded."

"Some will survive. If not there, then, thanks to you, here." He smiled. A touch

of the old Jase in his eyes. "They'll have to become men, you know."

"Why do you put it like that?"

"Because Jill uncraated the wolves, to help thin out the herds."

"They'll cull the children, too," Doc nodded. "I couldn't help them become men, but I think that will do it. They will have to band together, and find tools, and fire." His voice took on a dreamy quality. "Eventually, the wolves will come out of the darkness to join them at their campfires, and Man will have dogs again." He smiled. "I hope they don't over breed them like we did on earth. I doubt if Chihuahuas have ever forgotten

what we did to them."

"Doc," Jase said, urgently, "will you trust me? Will you wait for a minute while I leave? I . . . I want to try something. If you decide to go there may never be another chance."

Doc looked at him, mystified. "Alright, I'll wait."

Jase limped out of the door. Doc sat, watching his charges, proud of their alertness and flexibility, their potential for growth in the new land.

There was a creaking as the door swung open.

The woman's hair had been blond, once. Now it was white, heavy wrinkles around her eyes and mouth, years of hardship and disappointment souring what had once been beauty.

She blinked, at first seeing only Doc.

"Hello, Nat," he said to her.

She frowned. "What . . . ?" Then she saw Eve.

Their eyes locked, and Nat would have drawn back save for Jase's insistent hand at her back.

Eve drew close, peering into her mother's face as if trying to remember

her.

The old woman stuttered, then said, "Eve?" The Pith cocked her head and came closer, touching her mother's hand. Nat pulled it back, eyes wide.

Eve cooed, smiling, holding her baby out to Nat.

At first she flinched, then looked at the child, so much like Eve had been, so much . . . and slowly, without words or visible emotion, she took the child from Eve and cradled it, held it, and began to tremble. Her hand stretched out helplessly, and Eve came closer, took her mother's hand and the three of them, mother, child and grandchild, children of

different worlds, held each other. Nat cried for the pain that had driven them apart, the love that had brought them together.

Doc stood at the edge of the woods, looking back at the colonists who waved to them, asking for a swift return.

Perhaps so. Perhaps they could, now. Enough time had passed that understanding was a thing to be sought rather than avoided. And he missed the company of his own kind.

No, he corrected himself, the children were his kind. As he had told Jase, without explaining, he knew that they were human. He had tested it the only

way he could, by the only means available.

Eve walked beside him, her hand seeking his. "Doc," she cooed, her birdlike singsong voice loving. He gently took their child from her arms, kissing it.

At over sixty years of age, it felt odd to be a new father, but if his lover had her way, as she usually did, his strange family might grow larger still.

Together, the five of them headed into the forest, and home.