

# Futures

## The taming of the proto-shrew

Study what you most affect. **By Mark S. Bailen**



ILLUSTRATION BY JACEY

**S**tealing an escape pod was rash. Suicidal, even.

The science vessel, the *Christopher Sly*, had no means to rescue Kate once she entered Petroo's gravity well. But she was beyond caring. She fiercely loved the planet. By wagering her life, maybe she could stop the science team from scrubbing it. Kate loaded a cryo-chamber, a hab and two years of ready-eats. If she rationed her awake-time, she could survive for hundreds of years on the surface. Thousands. Plenty of time to discover what went wrong.

Two weeks earlier, Kate had stood on the upper deck of the *Christopher Sly*, scrutinizing an evolutionary flow chart. Petroo rotated below, with its terminator sliding across the viewport.

Minola, the lead engineer, approached. "The planet's a failure."

"You don't know that," said Kate.

"Our probes found no evidence of mammals."

Kate zoomed in on the chart. At the bottom were jellyfish, worms and insects. At the top were reptiles, octopuses and birds. The icon for mammals blinked red.

"No ungulates. No cetaceans. Not even a varmint." Minola touched her shoulder. "If only we had found one mammal."

"I need more time."

"For what? Selective breeding? We're not farmers, Kate. We're evolutionary engineers."

"But ..."

"The science team already voted. We're scrubbing Petroo."

Kate gasped. "You can't!" She had designed every step of Petroo's evolutionary flow chart. She'd sacrificed everything to witness the results, flying halfway across the galaxy, joining Progress and cryo-sleeping for 16,000 years. Now the team wanted to destroy her life's work.

"You want a mammal on Petroo? You've got one!"

The surface was covered in jungle,

interrupted by trees as big as cathedrals. The sky was tangerine, laced with clouds. Dragonflies darted and Kate reached out to touch one. The planet hadn't evolved exactly as she'd planned, but it was thriving.

She spent a week swinging her machete, hacking towards the impact zone of her genesis pods. Yet she found no evidence of mammals. No rooting, tracks, masticated leaves or scat. And nothing on infrared.

"Kate?" Minola's voice crackled. "Come in."

She maintained radio silence, camping near the buttress of a tree. The entire landscape chattered. Blue ants patrolled the trunk. The trees were preposterously large, with branches forming vaults and archways. How had they got so big? Had she miscalculated Petroo's gravity? The density of the air?

"Kate!"

Thousands of years ago, when she accepted the position as evolutionary engineer, Petroo was a blank slate. The deep-space scans revealed molluscs in the water and lichen

## Futures

on the land, but little else. Kate designed 17 genesis pods to be launched in succession, staggered hundreds of years apart. The first round released aquatic biota, germs and fungi. The next round, flora. The next deposited insects, centipedes and spiders. The final rounds delivered reptiles, birds ... and mammals. Each pod contained micro-hatcheries, germinating tanks and bio-hacked viruses to accelerate mutation. The intention was to create life, adapted for Petroo. The pods reduced 250 million years of evolution – longer than the Mesozoic era – to less than 16,000 years.

“You’re acting like a child,” said Minola. “Let us know you’re OK.”

Kate clicked the transmitter. “I’m fine.”

“You understand, we can’t retrieve you? A drop ship won’t arrive for 600 years.”

“Good.”

“And our minds haven’t changed,” Minola chided. “We’re scrubbing the planet in three days. I’ve transmitted a topographical map showing caves in your area. Stay in cryo and you will survive.”

Kate flipped off her radio. She was done listening to Minola. His science team showed little interest in the surface of the planet. They despised fieldwork and refused to get their hands dirty. They derided her ideas about accelerated evolution. They believed cataclysm was the only way to accomplish evolutionary jumps.

For mammals to evolve and brains to grow, planets required a meteor strike, a supervolcano or a *scrub*. Ninety per cent of life had to perish. The rest must struggle. Millions of years later, according to their theories, mammals might evolve. Might.

Failure was the norm.

The following day, Kate hiked to the impact zone. She spotted her first genesis pod, gleaming and covered in vines. Another pod sat a hundred yards away. By mid-afternoon, she had cleared enough foliage to reveal a mammalian pod. The germination tank was cracked open. The canisters, empty. The proto-mammals had been freed. So where did they go? Did they simply die off? For the next two days, Kate walked the perimeter, using her infrared scanner, and still found nothing. Exhausted, she settled against a tree and munched a calorie bar.

Maybe Minola was right. Petroo was a failure.

Chittering started up behind her.

Kate paused. Or was that scratching?

She listened to the trunk. Something lived inside the tree’s superstructure. She scaled a buttress, climbing 30 feet up. The sound of scratching increased. Burrows dotted the upper trunk like windows in a cathedral. Kate peeked down an archway. A shadow scampered back. She held out her calorie bar. A snout emerged. And then large eyes.

Hello?

The creature had dun fur, stubby ears and claws. It looked like a shrew but its body was elongated. She recognized it as a juramaia – a proto-shrew, one of the first mammals she had developed.

“You lazy thing.” Kate reached in and grabbed its tail. “Why are you living in a tree? You were supposed to migrate to the savannah and evolve into rabbits, antelope and bison.”

She radioed the *Christopher Sly*. “I found a mammal. They’re living in the trees.”

Silence.

“Minola! Don’t scrub the planet!”

The radio crackled. “You’ve had 16,000 years, Kate.”

“So give me a few thousand more. Drop my lab and a germination kit.”

Minola sighed. “What’s your plan?”

“Plan?” Kate rolled up her sleeves. “Accelerated evolution? Selective breeding? Who knows?” She smiled. “I might even become a farmer.”

**Mark S. Bailen** has an MFA from the University of Arizona. He has been published in *Fantasy Magazine*, *Nature Futures* and *Little Blue Marble*, and has written and illustrated an award-winning children’s book titled *Earf*. Learn more at [fakemountain.com](http://fakemountain.com).

## THE STORY BEHIND THE STORY

**Mark S. Bailen** reveals the inspiration behind *The taming of the proto-shrew*.

This story was inspired by an article correlating sharp increases in brain size to climate disasters, implying that the more dangerous the environment, the smarter we get. Here’s hoping that there’s another way. I was also musing about the tumultuous relationship between Petruchio and Katherina in Shakespeare’s *The Taming of the Shrew*.

