

## Voyages to Mars 4

### Sending Humans

Matt Shindell:

Hello, and welcome to another edition of Voyages to Mars from the Smithsonian's National Air and Space Museum. I'm Matt Shindell. This is our monthly literary mixtape, where we explore classic sci-fi readings, set to music by DJ Kid Koala. Our previous tracks have launched us from earth, flown us by the moon and paid tribute to the robots that explore the Red Planet. Track four is about the possible next step in Martian exploration, sending humans. NASA and other national space agencies have been proposing human Mars missions since the early days of the space race. Visions of Mars exploration inspired many of the engineers who work to build the first rockets. We haven't sent humans to Mars yet, and we can't predict if or when it will happen. But we do know that it's been a powerful motivator in the exploration of space.

One of the most influential stories of Mars is Ray Bradbury's *The Martian Chronicles*. It was so popular that when NASA first successfully orbited Mars with a Robotic Explorer, the agency actually invited Bradbury to be on hand, to help interpret the significance of this feat. *The Chronicles*, published in 1950, continue to be a widely read piece of science fiction literature today, despite the fact that the Mars described in the book bears little resemblance to Mars as we understand it now. While the collection of stories that comprise the book, didn't get everything right and how could they, the world's first satellite hadn't even been launched yet. They did manage to explore the meaning of sending humans to Mars. Bradbury's Mars was no utopia. The extension of human society to Mars brought with it all that was good and bad about human exploration and expansion on earth and written as it was in the midst of the Cold War. The threat of nuclear apocalypse is very present in the *Chronicles*.

Today, we'll be listening to two passages from the *Chronicles*, *The Settlers*, and *The Green Morning*. In the short and meditative, *The Settlers* Bradbury describes the first human settlers of Mars. They're called the lonely ones. Here, Bradbury imagines that the first to settle Mars would be single men with nothing to tie them back to earth. A trope often used in gendered frontier stories to explain why men left the cities to make lives in the wild.

Next, *The Green Morning* describes one immigrant from earth, Benjamin Driscoll. In this story Bradbury plays with American mythology presenting his own version of the legend of Johnny Appleseed. Driscoll whose lungs just can't adapt to the thin Martian air, undertakes a tree planting project on Mars. In what seems like a miracle, his efforts bear immediate fruit, transforming the Martian landscape into a tall and wild forest with breathable air. Reading for us today is storyteller and DC's own Ruth Allen Ginsburg.

Ruth Allen Ginsburg:

*The Martian Chronicles* by Ray Bradbury. Selections from August 2032, *The Settlers* and December 2032, *The Green Morning*.

August 2032, *The Settlers*.

The men of Earth came to Mars.

They came because they were afraid or unafraid, because they were happy or unhappy, because they felt like Pilgrims or did not feel like Pilgrims. There was a reason for each man. They were leaving bad wives or bad jobs or bad towns; they were coming to find something or leave something or get

something, to dig up something or bury something or leave something alone. They were coming with small dreams or large dreams or none at all. But a government finger pointed from four-color posters in many towns: THERE'S WORK FOR YOU IN THE SKY: SEE MARS! and the men shuffled forward, only a few at first, a double-score, for most men felt the great illness in them even before the rocket fired into space. And this disease was called The Loneliness, because when you saw your home town dwindle the size of your fist and then lemon-size and then pin-size and vanish in the fire-wake, you felt you had never been born, there was no town, you were nowhere, with space all around, nothing familiar, only other strange men. And when the state of Illinois, Iowa, Missouri, or Montana vanished into cloud seas, and, doubly, when the United States shrank to a misted island and the entire planet Earth became a muddy baseball tossed away, then you were alone, wandering in the meadows of space, on your way to a place you couldn't imagine.

So it was not unusual that the first men were few. The number grew steadily in proportion to the census of Earth Men already on Mars. There was comfort in numbers. But the first Lonely Ones had to stand by themselves....

December 2032, The Green Morning.

When the sun set he crouched by the path and cooked a small supper and listened to the fire crack while he put the food in his mouth and chewed thoughtfully. It had been a day not unlike thirty others, with many neat holes dug in the dawn hours, seeds dropped in, and water brought from the bright canals. Now, with an iron weariness in his slight body, he lay and watched the sky color from one darkness to another.

His name was Benjamin Driscoll, and he was thirty-one years old. And the thing that he wanted was Mars grown green and tall with trees and foliage, producing air, more air, growing larger with each season; trees to cool the towns in the boiling summer, trees to hold back the winter winds. There were so many things a tree could do: add color, provide shade, drop fruit or become a children's playground, a whole sky universe to climb and hang from; an architecture of food and pleasure, that was a tree. But most of all the trees would distill an icy air for the lungs, and a gentle rustling for the ear when you lay nights in your snowy bed and were gentled to sleep by the sound.

He lay listening to the dark earth gather itself, waiting for the sun, for the rains that hadn't come yet. His ear to the ground, he could hear the feet of the years ahead moving at a distance, and he imagined the seeds he had placed today sprouting up with green and taking hold on the sky, pushing out branch after branch, until Mars was an afternoon forest, Mars was a shining orchard.

In the early morning, with the small sun lifting faintly among the folded hills, he would be up and finished with a smoky breakfast in a few minutes and, trodding out the fire ashes, be on his way with knapsacks, testing, digging, placing seed or sprout, tamping lightly, watering, going on, whistling, looking at the clear sky brightening toward a warm noon.

"You need the air," he told his night fire. The fire was a ruddy, lively companion that snapped back at you, that slept close by with drowsy pink eyes warm through the chilly night. "We all need the air. It's a thin air here on Mars. You get tired so soon. It's like living in the Andes, in South America, high. You inhale and don't get anything. It doesn't satisfy."

He felt his rib cage. In thirty days, how it had grown. To take in more air, they would all have to build their lungs. Or plant more trees.

“That’s what I’m here for,” he said. The fire popped. “In school they told a story about Johnny Appleseed walking across America planting apple trees. Well, I’m doing more. I’m planting oaks, elms, and maples, every kind of tree, aspens and deodars and chestnuts. Instead of making just fruit for the stomach, I’m making air for the lungs. When those trees grow up some year, think of the oxygen they’ll make!”

He remembered his arrival on Mars. Like a thousand others, he had gazed out upon a still morning and thought, How do I fit here? What will I do? Is there a job for me?

Then he had fainted.

Someone pushed a vial of ammonia to his nose and, coughing, he came around.

“You’ll be all right,” said the doctor.

“What happened?”

“The air’s pretty thin. Some can’t take it. I think you’ll have to go back to Earth.”

“No!” He sat up and almost immediately felt his eyes darken and Mars revolve twice around under him. His nostrils dilated and he forced his lungs to drink in deep nothingnesses. “I’ll be all right. I’ve got to stay here!”

They let him lie gasping in horrid fishlike motions. And he thought, Air, air, air. They’re sending me back because of air. And he turned his head to look across the Martian fields and hills. He brought them to focus, and the first thing he noticed was that there were no trees, no trees at all, as far as you could look in any direction. The land was down upon itself, a land of black loam, but nothing on it, not even grass. Air, he thought, the thin stuff whistling in his nostrils. Air, air. And on top of hills, or in their shadows, or even by little creeks, not a tree and not a single green blade of grass. Of course! He felt the answer came not from his mind, but his lungs and his throat. And the thought was like a sudden gust of pure oxygen, raising him up. Trees and grass. He looked down at his hands and turned them over. He would plant trees and grass. That would be his job, to fight against the very thing that might prevent his staying here. He would have a private horticultural war with Mars. There lay the old soil, and the plants of it so ancient they had worn themselves out. But what if new forms were introduced? Earth trees, great mimosas and weeping willows and magnolias and magnificent eucalyptus. What then? There was no guessing what mineral wealth hid in the soil, untapped because the old ferns, flowers, bushes, and trees had tired themselves to death.

“Let me up!” he shouted. “I’ve got to see the Co-ordinator!”

He and the Co-ordinator had talked an entire morning about things that grew and were green. It would be months, if not years, before organized planting began. So far, frosted food was brought from Earth in flying icicles; a few community gardens were greening up in hydroponic plants.

“Meanwhile,” said the Co-ordinator, “it’s your job. We’ll get what seed we can for you, a little equipment. Space on the rockets is mighty precious now. I’m afraid, since these first towns are mining communities, there won’t be much sympathy for your tree planting—”

“But you’ll let me do it?”

They let him do it. Provided with a single motorcycle, its bin full of rich seeds and sprouts, he had parked his vehicle in the valley wilderness and struck out on foot over the land.

That had been thirty days ago, and he had never glanced back. For looking back would have been sickening to the heart. The weather was excessively dry; it was doubtful if any seeds had sprouted yet. Perhaps his entire campaign, his four weeks of bending and scooping were lost. He kept his eyes only ahead of him, going on down this wide shallow valley under the sun, away from First Town, waiting for the rains to come.

Clouds were gathering over the dry mountains now as he drew his blanket over his shoulders. Mars was a place as unpredictable as time. He felt the baked hills simmering down into frosty night, and he thought of the rich, inky soil, a soil so black and shiny it almost crawled and stirred in your fist, a rank soil from which might sprout gigantic beanstalks from which, with bone-shaking concussion, might drop screaming giants.

The fire fluttered into sleepy ash. The air tremored to the distant roll of a cartwheel. Thunder. A sudden odor of water. Tonight, he thought, and put his hand out to feel for rain. Tonight.

He awoke to a tap on his brow.

Water ran down his nose into his lips.

Another drop hit his eye, blurring it. Another splashed his chin.

The rain.

Raw, gentle, and easy, it mizzled out of the high air, a special elixir, tasting of spells and stars and air, carrying a peppery dust in it, and moving like a rare light sherry on his tongue.

Rain.

He sat up. He let the blanket fall and his blue denim shirt spot, while the rain took on more solid drops. The fire looked as though an invisible animal were dancing on it, crushing it, until it was angry smoke. The rain fell. The great black lid of sky cracked in six powdery blue chips, like a marvelous crackled glaze, and rushed down. He saw ten billion rain crystals, hesitating long enough to be photographed by the electrical display. Then darkness and water.

He was drenched to the skin, but he held his face up and let the water hit his eyelids, laughing. He clapped his hands together and stepped up and walked around his little camp, and it was one o’clock in the morning.

It rained steadily for two hours and then stopped. The stars came out freshly washed and clearer than ever.

Changing into dry clothes from his cellophane pack, Mr. Benjamin Driscoll lay down and went happily to sleep.

The sun rose slowly among the hills. It broke out upon the land quietly and wakened Mr. Driscoll where he lay.

He waited a moment before arising. He had worked and waited a long hot month, and now, standing up, he turned at last and faced the direction from which he had come.

It was a green morning.

As far as he could see the trees were standing up against the sky. Not one tree, not two, not a dozen, but the thousands he had planted in seed and sprout. And not little trees, no, not saplings, not little tender shoots, but great trees, huge trees, trees as tall as ten men, green and green and huge and round and full, trees shimmering their metallic leaves, trees whispering, trees in a line over hills, lemon trees, lime trees, redwoods and mimosas and oaks and elms and aspens, cherry, maple, ash, apple, orange, eucalyptus, stung by a tumultuous rain, nourished by alien and magical soil and, even as he watched, throwing out new branches, popping open new buds.

“Impossible!” cried Mr. Benjamin Driscoll.

But the valley and the morning were green.

And the air!

All about, like a moving current, a mountain river, came the new air, the oxygen blowing from the green trees. You could see it shimmer high in crystal billows. Oxygen, fresh, pure, green, cold oxygen turning the valley into a river delta. In a moment the town doors would flip wide, people would run out through the new miracle of oxygen, sniffing, gusting in lungfuls of it, cheeks pinking with it, noses frozen with it, lungs revived, hearts leaping and worn bodies lifted into a dance.

Mr. Benjamin Driscoll took one long deep drink of green water air and fainted.

Before he woke again five thousand new trees had climbed up into the yellow sun.

Matt Shindell:

Voyages to Mars is presented by AirSpace from the Smithsonian's National Air and Space Museum. It is produced by Katie Moyer, Matt Shindell, Jennifer Weingart, and Andrew Fletcher, mixed by Tarek Fouda, music by DJ Kid Koala. This series is made possible by the Secretary of the Smithsonian and the Smithsonian Orlando Regional Council