# THE THURSDAY TOADS

# To ANDRE NORTON

... for help and encouragement, much thanks!

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# THE THURSDAY TOADS

# SUTTER COUNTY 750 FORBES AVENI YUBA CITY, CA.

MANY A SLIP

When I'm excited, I have always been inclined to fumble. Add to that an unusual measure of curiosity and you can see—well, there's the old adage about the cat's untimely end.

In this case I was poking into every lab at the Gamow Institute. That's on Estrada, as you probably know, where I'd just planeted, armed with my new Ph.D. degree and unbounded optimism and expectations. After all, not many kids my age have an advanced degree in their pockets.

I'd been told to look around while getting my bearings. That's one of the great things about the Institute. They never put pressure on the new recruits. They realize that it takes a little time to adjust to a new planet and they aren't looking for plodders. When they sign you up, they know that they're buying brains. So nobody tells you what to do at first. You're encouraged to look in on all the projects and choose what interests you.

That's what I was doing my second day on Estrada —exploring. Since I'd been trained as an ecologist, I gravitated to the work that might come under that heading. Of course, X-Tee ecology (extra-terrestrial animals, to you) can be a far cry from what you've learned on Earth. But that was what I'd come for. New life forms. New mysteries. New challenges.

My mind was running along these lines when I looked into that lab and saw the elderly scientist and his young assistant bending over an odd little box while they adjusted the controls and levers on a large machine.

"Just hold it steady now, Luki," said the man. His voice started off as a commanding bass, but was inclined to go up the scale as he talked. In fact, if he talked long enough, it might squeak in the higher registers, as though his mind had gone on to something else and what he was saying was of no importance after all.

"Let me know when he's in the right position, girl. We don't want to mess it up again this time."

"It's hard to see clearly, Dr. Thursby," said the assistant in a worried tone.

She wore a white lab coat and her hair was tied back, concealed by a scarf, as she fluttered around, shifting her hold on the box and peering through an opening.

"They should have given us a larger window." She raised her head and in doing so she noticed me.

"In that case, the animal would see more and might get excited. We've got to be sure that the ray hits it exactly right. Try again, girl—er—who's this? You were looking for me, young man?"

"Just looking. I'm a new recruit and they told me it was all right to look around."

"Why can't he help?" asked the girl. "He could hold the box while I adjust the nozzle, so you can concentrate on throwing the switch, Doctor."

"Excellent! If you would be so kind. Please don't get the idea that we're trying to preempt your services. But you might like to get the feel of things.

That's right, show him how to hold the box, Miss Sorrell." His voice trailed off as he fingered the controls on his machine.

I was not surprised to find my services in demand so soon after my arrival. At the same time, there was something the girl had just said which rang a bell in the back of my mind.

"Anybody would be proud to serve you, Dr. Thursby, sir," I said, accepting the box from the young assistant.

"Eh—what—you know me, boy?" He seemed to be genuinely surprised.

"Who doesn't know of Dr. Cyril Thursby, the discoverer of the Toxic Toad? Thursby's Terror," I added, giving the X-Tee its popular name.

"Ah, yes indeed. And unfortunately still involved with the toad. Guess they wish I'd never discovered it. It's played hob with the colony on Thursday Planet."

"They named the planet after the doctor, you know," said the girl. "Only the early settlers kept getting the name wrong."

Dr. Thursby coughed modestly. "Probably just as well. We're still trying to learn how to control the species. In fact, that's one you've got right there in your hands."

This was when I began to get excited. Thursby's Terror was the most poisonous creature for its size on seven planets, and here I was holding one in my hands! Inside a box, of course. But what was to prevent it from boring its way out—from squirting a lethal attack? Hurriedly, I tried to remember just how the beast *did* attack. By fang? By sting? By spray?

"Hold it steady! Don't shake so!" The lab assistant stooped to peer into the little window. "I think he's positioned properly now, Doctor. If you'll make contact when I count three. One, two..."

It was at this point that I dropped the box.

"Oh! We were just ready? How could you!" the girl demanded.

"Careful now—mustn't damage it—invaluable to the work." Thursby emerged from behind his machine.

Naturally, I felt I must do something to reestablish trust. Otherwise, far from competing for my services, nobody would want me on any project. As quickly as I could, I scooped up the box. To my horror, the lid came off in my hand. It's fastening must have been jarred loose when the container hit the floor. For a second time the box fell, and this time the occupant rolled

out.

I found myself facing a Toxic Toad. A Thursby Terror, very much alive and hopping mad!

It was not at all like an earthside toad. Later explorers have described it as resembling a large spider, or a crab. Indeed, it has a superficial resemblance to all of those. Like the Terran spider at home, it has many hairy legs. Like the crab, its eyes are on stalks, enabling it to see in all directions. And like the toad, it can jump. But it is much larger than any of these Terran species, being at least a foot in length—and it is much, much more deadly. To all who cross its path, this fact is advertised by its color—a nasty bright red.

I had read a great deal about its potent poison. Enough to make anyone skip a visit to Thursday Planet. Now unpredictably, the beast had turned up on Estrada, where it had no business being, and it was jumping at me!

I jerked away and fell over the floor cables of the doctor's machine. As I went down, I heard Miss Sorrell scream, and then a most excruciating pain shot up my leg.

"Stay right where you are, everyone! I have the net!" cried Thursby. "Look out, Luki! Don't let him squash it!"

Through my haze of pain, I heard them scrabbling about and then Thursby's snort of triumph as he snapped shut some other, safer box.

"Got him! Intact, I hope. Now how's the boy? This is what happens when you try amateur help."

Miss Sorrell was bending over me, pulling at my arm, but I was quite unable to move.

"You'd better look, Doctor. I'm afraid it bit him."

"Oh, surely not!" cried Thursby. "How careless!"

I was dimly aware that Dr. Thursby came to survey me. The pain in my leg had dulled, but in its place came a creeping numbness along my whole body. As from a great distance, I heard them talking.

"Hadn't we better rush him to the hospital, Doctor?"

"What good would that do? He'd be dead on arrival. They haven't a thing to counteract the poison there. But we have the new serum!"

"But it hasn't finished testing, sir!"

"No time to quibble! Here, help me move him to the cot."

Thursby took my shoulders and the girl took my feet. I tried to protest, but found that I could not speak. My lips would not move to my command. No sound came up from my throat. I was heaved across the room onto a camp cot and they moved beyond the limits of my hazy sight.

Just when I thought all feeling had left me, I was jarred by a sharp jab in the arm. I might have screamed, but all I could do was silently curse the fate that had brought me to Estrada and led me down this particular corridor through the door of this lab.

I had thought I was smart to achieve my doctorate at the age of seventeen. And while everyone knows that space trips and X-Tee work are dangerous, I confidently expected to survive, at least until I had made a name for myself by some long-sought breakthrough or unlooked-for discovery. With all my brains, I was sure to get to the top. But here I was on my first assignment, finished off by a nasty X-Tee creature that I never should have tangled with in the first place. All this was churning in my mind as I sank rapidly into suffocating night.

I awoke in a hospital bed; somebody was massaging my legs. Life flowed back to prick me with a thousand little stabs and cramps.

"Mr. Abbott!" The voice was urgent. "Gillian Abbott! Oh, that *is* his name, isn't it? Are you sure?"

"That's what his papers say."

I recognized the voice of Luki Sorrell, the lab assistant, and I opened my eyes to stare straight into hers. She did not seem as cool and confident as she had been earlier, for she was frowning. Her working kerchief had slipped, loosing fair hair to hang about her face almost to her shoulders. Beyond her, I could see the nurse, still bent over my legs, watching me with hopeful concentration.

"I think we're getting results," she said.

"Oh, thank the stars!" cried Luki. "Do you think he should have a second shot of serum? Shall I call the doctor?"

"I wouldn't risk it, since it hasn't been fully tested. Let's give him more oxygen and trust to luck."

A mask was fitted efficiently over my face, and as the good air rushed into my lungs, memory sharpened. I'd been bitten by a Toxic Toad—and I was still alive! To the best of my knowledge, such a thing had never happened

before. Vaguely, I recalled that the girl had said something about testing serum. Or rather, lack of tests. Well, I'd tested it for them. They had their human guinea pig.

"You see, he's breathing easier," said the nurse. "His color's almost back to normal."

"I'd better tell Dr. Thursby. He'll be delighted. You know what this means, of course. They'd told us to halt the testing for further purification."

She disappeared from my line of vision, leaving me to wonder what kind of hideous complications I had managed to avoid. I flexed an arm, surprised to find that it obeyed my will. And I no longer felt numb all over.

Gratefully, I realized that I was actually comfortable. Comfortable—but very tired. With that I lost interest in all speculations and fell asleep.

My recovery was rapid. By the next day I was sitting up in bed, able to receive delegations of doctors. Some seemed to be trying to thank me for getting bitten and thus saving them incalculable time in the search for an antidote. Others looked at me hopefully, as though planning batteries of tests, to be run as soon as I might be sufficiently recovered. I vowed to escape as soon as possible from the hospital and their clutches.

The younger members of the Institute, especially those newly arrived, like myself, came to congratulate me on my narrow escape. But the consensus of opinion was that while I was now considered a valuable man for any project (anyone who comes out of Thursby's lab alive can survive anything the cosmos can throw at him!), they were all glad not to have been in my place.

The day I was released from the hospital—happily escaping further tests—Dr. Thursby put in an appearance. Come to apologize for what happened in his lab, I thought, or at least to congratulate me on my narrow escape.

However, the doctor, wasting no time on apologies or congratulations, came right to the point.

"Well now, young man," he began, shaking hands absent-mindedly while studying the data on my chart. "Gillian Abbott—er—*Dr*. Abbott, I see. I hope you don't feel that we've treated you too roughly. You've really been fortunate, you know. Very fortunate, as well as helpful to us, I might add." He lowered his voice and fixed me with a compelling eye. "I hope you're going to continue to be helpful to us, Dr. Abbott!"

"In what way?" I asked. I noticed Miss Sorrell hovering in the background

and it occurred to me that old Thursby might have come for other reasons than I had first thought. "I suppose I should thank you for saving my life," I said. "Even though it was in your lab I was...

"Of course, of course," cut in Thursby. It might have been usual routine to save the lives of people bitten by his Toxic Toads. "Only too happy that the serum was effective and with no side effects this time. Represents a lot of time and work, you know. But what I really came for was to see if you've been signed up for any project. Everybody wants you, you know. Oh, forget about your little fumble!" He had seen my raised eyebrows. "Might have happened to anyone fresh from Terra. People now figure that you're tough. But I rather hoped I might get first chance. So how about it? Will you give some thought to joining our little project?"

I was so taken aback that for the moment I was speechless. Return to work in that lab where I almost had been killed? He couldn't be serious! But while I stared unbelievingly, Luki Sorrell pushed in between us.

"Oh, do please sign with us, Dr. Abbott! You're absolutely invaluable. And you'll learn the techniques easily, I'm sure. You're an ecologist, aren't you? I looked it up." She flushed then and her teeth closed on her lower lip, as though she was aware she might have been prying.

"There, you see." Thursby nodded. "Do it for Luki if not for me. She's been pretty bored the past year with only an old codger like me to work with."

"Doctor!" Luki was really blushing now. "Nobody could be bored working with you!" She backed away a little and moved behind him.

I was far from convinced. Just the thought of their lab with that horrible red monstrosity jumping around in it dampened any interest Luki might have aroused in me. I stood up.

"Sorry, but I'm afraid I'll take any other offer made me by any other project, rather than work in that lab of yours."

"Oh, but we aren't going to be working in the lab," Luki answered quickly.

"Quite a natural reaction." Dr. Thursby nodded again. "But we aren't offering you lab work, Dr. Abbott. We'll be going into the field almost immediately, and if you so wish, we can arrange for Luki and myself to take care of any further lab work."

I thought about it. Field work probably meant leaving the planet. Somehow I had come to dislike Estrada almost as much as Thursby's lab. And after all, it wasn't really his fault that I'd been bitten. To be fair, I must admit my own clumsiness. Who knows what I might drop in somebody else's lab? But

field work! New life forms! A chance to follow up my recent thesis on X-Tee life!

"Will you be leaving the planet then? Where are you planning to go?" I asked cautiously.

"Why, back to Thursday Planet, of course. As I told you the other day, we're trying to rid the planet of the—er, toads. We've been irradiating a selection of males, as we were doing with the one that—er—bit you. Now we must release them to find the females which will then produce infertile eggs. You know the technique, I'm sure."

For a good second, I was really shocked. Far from wanting me in their lab, where I would encounter a "selection of toads," they expected me to go with them to the planet that was positively teeming with the creatures!

"It's out of the question! I never want to see one of those things again. There must be other interesting life forms to work with, even dangerous ones, but not those toads!"

"But you're probably immune now!" Luki cried. "So our tests with animals have indicated. Don't you realize you've nothing to fear from them any more?"

I found I did not in the least like the way she said "fear," true though it might be.

"It's not that I'm afraid. I just have a very healthy respect for them. And they hardly come into my field of study."

"But surely X-Tee classification should interest you," put in Dr. Thursby. "It's one of the points of our program and you're just the man to undertake it. The only completely immune... Of course, Luki and I plan a course of injections before long, but you'll be far safer than we are. Be a positive waste for you to go to any other project! You think about it, Dr. Abbott. You won't find you've made a mistake if you decide to come."

Plainly satisfied that he had made his point, Thursby gave a final quick jerk of his head and left. But Luki hesitated a moment at the door.

"Do please come with us," she urged. "We'll be leaving within a week. You know—we do need you."

I stood, looking at the now closed door. So I was immune. But Luki? I had an odd and disturbing mental picture of her in a circle of menacing red toads, while I, the one man in the universe now permanently immune, stayed as far away as possible.

Certainly, I told myself, all such field workers would now be given a course of serum treatments. After all, I'd proved the process to be safe and effective. Or had I? I began to remember vague hints, dropped by doctors and students who had visited my hospital room, of earlier unsuccessful cases. Patients who died without recovering consciousness, or if still alive were no more than vegetables. I knew only too well that one good result does not make a successful experiment. Each individual represents a different combination of genes, reactions, and allergies. What worked for me might not work for others. And until an antidote is proved safe for all, it cannot be called reliable. Even that first of all antidotes, developed by the legendary Pasteur for rabies, has been known to kill instead of cure.

No, it still might be a long time before the serum was used indiscriminately, and that picture of Luki kept returning to my mind. Then I knew that I had no choice. I knew I'd be going with them to Thursday Planet, whether I liked it or not.

# GETTING THERE IS HALF THE FUN

Once I had decided, everything went smoothly and almost too fast. I was signed on for the Thursday Planet Project without any hitch and my ticket for the journey was issued. Then I found myself holding a supply requisition that brought me to Luki for assistance.

"Thursday is still a frontier world." She was checking her own list. "Better try to remember everything now, Gil. Omissions can't very well be filled in later, you know."

Luki and I were already on a first-name basis. Occasionally, Dr. Thursby remembered me and over a break for refreshment told some tale of his own off-world venturing. Both insisted that I stay out of their lab and leave the crating of the Toxic Toads entirely to them. Which suited me very well indeed. I thought perhaps they feared some mishap of an unpleasant nature might put me off even now.

Of course, I understood how important it was to get the toads to their destination alive and in good condition. But after my recent experience, I found it hard to worry about whether they might suffer under high G or be uncomfortable in free-fall. When my own packing had been taken care of, I had little to do and I was inclined to hover in the lab doorway, watching the elaborate preparations for shipping the experimental animals.

"I see that Gil is getting bored," Dr. Thursby observed. "How about setting him up with briefing material?"

Luki obediently brought out videotapes and a viewer, leaving me to learn as

much as I could about our future destination.

"You'll only have time to run through them once or twice," she warned as she left. "But the more you learn now, the less you'll have to pick up later."

A preview of Thursday Planet was exciting in its own way. The few accounts I had read at home had concentrated on the toads and the work of Dr. Thursby. Almost nothing had been said generally about the world where these monsters had evolved.

The first tape showed the planet from space. While the sphere was marked with green and blue and a goodly cloud cover of white, I immediately noted the broad band of red and brown desert that encircled the equator.

"Thursday Planet orbits near the inner limit of the ecosphere," the voice on the sound track droned, "or the Zone of Habitability, as you may have heard it called. This is the region of space around a star offering planetary conditions suitable for the development of life. Thursday's equatorial tilt is similar to the Earth's. But since it is so close to the hot limits of the ecosphere, its equatorial regions are quite uninhabitable."

I was suitably impressed by closer views of the wide, burning desert which divided Thursday Planet into halves. The sound track continued to explain that since most of the land area was in the southern hemisphere —reversing the situation on Earth—this was where the Terran colony had been planted.

"It might seem on first consideration," explained the voice as views of the forests and mountains of the hemisphere appeared, "that a region limited to approximately 51 degrees to 66 degrees of latitude might not be worth the effort of colonizing. However, even a small geographic area may harbor new knowledge or valuable natural resources, and unless other specific drawbacks are encountered, Thursday will probably repay the effort and money put into it."

There was discussion next of resources already known and those hopefully indicated. I was shown pictures of the early settlements—this was a reminder that the film had been made some years before. Then came the adverse list of colonizing difficulties, delivered with the same precision as the favorable report. The first of these was, of course, the Toxic Toad. A close-up of the animal flashed on, so I was able to get a better look than had been afforded in those few frantic moments of my first meeting with it. There was no doubt in my mind that it was probably the most loathsome creature that nature had ever produced. But it was evident that those who had prepared this briefing did not want to alarm any possible emigrants to Thursday. The habits of the toad were listed and viewers advised to stay

clear of any specimen met with. Nothing was said about the death rate from bites or the lack of an antidote. It was hoped, the tape stated, that they would soon be eliminated from the planet. Science was working on that problem. Then the film switched to views of that equatorial desert, the Heat Barrier, another of the big drawbacks to colonization.

When I finished the tape, I examined the label on the container. Sure enough, this briefing had been recorded almost ten years earlier. And science, in the person of Dr. Cyril Thursby, was still working on the elimination of the toads. How had the colonists managed meanwhile? Now he was about to offer them both an antidote and the means of eradicating the pests. But what might we find on Thursday when we got there? Would the colonists perhaps have been wiped out by now? Or have become discouraged and left in large numbers? Or might they even have worked out some local method of dealing with the toads themselves?

I would have liked to ask such questions, but the right time never seemed to come. Dr. Thursby was always hurrying somewhere, and it seemed impertinent even to suggest he might now be too late. In the end, I turned to Luki.

"Look here, this tape is almost ten years old." I waylaid her at the door of the lab. "What's happened on Thursday since? Maybe they've solved the problem without us."

"Don't be silly!" she snapped indignantly. "Do you think Dr. Thursby would be working on a problem already solved?"

She gazed at me with the kind of look I've seen before—as if I were talking about something I

couldn't possibly understand. It's an attitude I've encountered with people who find out I'm both seventeen and a Ph.D. It seems to upset them. In this case, Luki decided not to say it after all. I found it quite amusing to watch her change of expression.

"Dr. Thursby maintains contact with the colony on Thursday. The situation there is as serious as ever. That's why we're hurrying to get off on the next ship."

Luki might be a devoted disciple of the elderly scientist, but she could not possibly know as much about science as I. She was only a lab assistant. Probably did not yet have her college degree. It was going to be fun sticking pins into her pet idol just to watch her eyes flash. I went back to studying the briefing tape, and all too quickly the day came when we were to go into the field, as Thursby put it.

Meanwhile, I had grown to appreciate Estrada and the Gamow Institute. Since I had miraculously survived the encounter with the Toxic Toad, I had become a celebrity of a sort. Young scientists asked my opinion on subjects of which I had no knowledge, and older scientists came to proffer advice that might be helpful to my career.

With the interstellar ship reported out in orbit, we three prepared to board the little shuttle rocket that would take us to the big star ship. Most of our luggage, including the carefully packed cages of toads, had gone ahead on a freight shuttle. By the time we reached orbit and passed through the connecting locks from our shuttle into the larger ship, they had been loaded through some cargo hatch.

At least, I took it for granted that they were packed away. For the first time I had the company of Dr. Thursby and Luki without Toxic Toads in the immediate vicinity. I could settle down and enjoy the trip.

But I had hardly found my way to my cabin—a single, which was little more than a cell, with one bunk and not much else—when Luki knocked at the door.

"We'll be leaving orbit shortly," she reported. "The captain is anxious to get into deep space."

Remembering my departure from Earth, when the passengers gathered in the viewport lounge to watch our planet diminish in all its blue and white glory, I expected to be invited to a similar ceremony now. But Luki continued to stand in the doorway, blocking my exit.

"I don't know if anybody told you, Gil, but this is not a deluxe passenger liner, the sort of thing you came on."

Looking around at my cramped quarters, I could only agree to that.

"That's obvious. But I guess one doesn't spend much time in here. I realize you have to rough it on these field trips."

"Well, yes, I guess that's what you could call it. We don't much care for it ourselves, but it's still the only kind of ship that calls at Thursday. Once we get the problems there worked out and the colony grows, I daresay they'll have all sorts of ships docking—even tourists."

"And then you think the trip won't be so interesting, is that it?"

"No. But that's why I thought I ought to explain. They don't have any luxuries or comforts aboard. In fact, they have rather less of everything, so they expect passengers to travel in suspension."

"In what?"

"You know, suspended animation. We just go to sleep and on what seems like tomorrow we wake up and find we're there."

A lot of old, vague stories came crowding into my mind. Tales I'd heard in school and at the university, of voyagers who went to sleep and never woke up. Of ships that never made port because the one crewman in command had an accident, allowing a cargo of unconscious humanity to go on forever across the galaxy, lacking a guide to a safe orbit or a hand to awaken the sleepers.

"But I didn't think this trip was long enough for that," I protested.

"It isn't really. As I told you, it's this kind of ship. They don't want to use space and money on supplies. You know, food, water, air. It's figured to a minimum and they only keep a skeleton crew awake. So, of course, they expect the passengers to go into suspension, too. It's not at all bad, Gil. I've done it several times myself."

No wonder there had been so few crewmen around when we boarded! No one to show me to my cabin. Well, apparently this was just one more of the hazards you had to accept on the frontiers of space. If everyone else could do it, so could I.

"Just tell me one thing," I asked Luki. "When's tomorrow?'n

"When? Oh, you mean how long? Well, I'm not really sure. It all depends on what time you're talking about. Earth time? Estrada time? Ship's time? Maybe you should ask Dr. Thursby about that. He understands it better than I do. But in that case, we'd better hurry. He may have already gone under."

"They don't lose any time, do they?" As I spoke, I realized that for awhile I'd been aware of a dull vibration, a humming throughout the ship. It meant we were spacing. Perhaps already thousands of miles out from Estrada. No doubt the ship's medic was now on his way to my cabin. Coming to give me the shot that would put me to sleep—for how long? Until we reached port. Mentally, I tried to compute the distance and our possible speed; to guess at the probable length of time in suspension. I gave up when I realized that I had failed to memorize the figures for Thursday Planet's position. "I wouldn't think of bothering him at a time like this," I told Luki. "Just make a guess yourself."

"Well, I suppose it's a few months at least. But it won't seem like that, believe me. It seems just like tomorrow. And you won't be more than a day older. You'll have saved all those months out of your life!"

I glanced around my cabin and decided she was right. To be conscious for months in this cell—I'd be bored to the vegetable state of mind!

"Oh, all right," I said. "But if we've got to go to sleep any minute now, what are you doing here? Aren't you joining the party?"

Luki laughed and her blond hair swished across her shoulders as she tossed her head.

"Silly! I'm here to see that you're comfortable and have everything you need. And anyhow, it's my turn to stay awake and watch the toads. I'll have my chance at suspension later."

"Watch the toads! Can't they be suspended, too?"

"We hope so. We've done some experiments and we're trying a couple first. But it would be dreadful if we arrived on Thursday and all the toads were dead!"

"Yes. I guess it would," I admitted reluctantly.

"So you see, one of us has to look in on them now and then. And we take turns at it. But we didn't think we should ask you. With so little experience..."

"Quite right," I agreed quickly. "I'd be next to useless. But wouldn't you like me to stay awake for a bit to keep you company?"

"Of course, I'd like it," she smiled. "But the captain wouldn't. Or the doctor. He'll be along pretty soon, once he's got my boss taken care of. I just thought I ought to explain first. Sort of prepare you."

"I'm awfully glad you did," I said. "I hate to think what I might have said if I hadn't realized. In fact, I might have kicked the good doctor right out."

"I'm afraid you might have found that difficult," she said, moving aside from the door.

Immediately, the opening was filled by a huge, burly form that just managed to squeeze into my miniature cell.

"Dr. Hornby—Dr. Abbott," Luki said. "I've been explaining to him about suspended animation, Doctor."

"Nothing to it," growled my visitor in a voice that came up from his shoes and seemed to indicate that he would take no nonsense from passengers. "You must get back in your bunk." His great hand pressed firmly against my chest encouraged me to obey instructions. "Now stretch out comfortably and think pleasant thoughts. I promise not to hurt with the needle, and

pouff! When you wake up we are in orbit at our destination!"

I half-expected him to reach down and swing my legs up onto the bed, the quicker to get his job done and get out. But instead he paused and smiled down at me in what was meant as encouragement for a nervous neophyte.

"Let's see now, Miss Sorrell. He takes the duration, does he not?" He opened his bag and studied a notebook before getting out his instruments. "Thursday Planet, that's what we want. And all the way."

"Just a moment, Doctor," interrupted Luki. "We haven't asked him about subconscious tapes. You do have a selection, don't you?"

"Everything to make our guests happy!" The doctor consulted another list. "You may choose from: Travels Through the Galaxy—Studies in the Properties of Stars—That's what your boss selected. Said he didn't begin to know all he needed about stellar evolution and it would be a good way of not wasting time."

"But you can also have fun," Luki broke in again. "I'm going to dream a novel. They have a whole collection of Gothics. Very exciting. It's much more fun than reading them and I never have time for that anyhow. Why don't you try one? They also have some good mysteries and suspense stories."

"No thank you," I said. "I've had enough mystery and suspense in my real life. I think I'll just rest, if you don't mind."

"Very good plan," said the doctor, putting aside his tapes and getting out his needle.

But Luki was dissatisfied. "Oh, think of the time you're wasting! You could be really learning something, like Dr. Thursby, if you don't want to be entertained. They have lots of good literature, classics going back thousands of years. We scientists have so little time to study things like that."

She looked so disappointed in me that I relented. Also, at this crucial moment, I remembered my mother. I had not thought about her for quite a long time now. In fact, I tried not to—ever since that day, three years ago Earth time, when both she and Dad had managed to blow themselves up in their lab.

But now I heard her saying quite clearly, "If you've missed out on reading Shakespeare, you've missed out on the greatness of man." She was fond of saying things like that when she thought I was getting too wrapped up in an experiment. And I remembered her singing one of the songs that she

#### loved:

Under the greenwood tree, Who loves to lie with me...

That was Shakespeare and it sounded quite good. But I'd found the archaic language discouraging and besides I was more interested in X-Tee experiments. So now was my chance to test out my mother's words.

"Do you happen to have something called Shakespeare?" I asked, half-hoping that he didn't. However, it seemed that he did.

"Of course. He's that playwright from before the space age. Not much call for him nowadays, but I think we have one or two. So just make yourself comfortable, Dr. Abbott." And once again the doctor began to pull things out of his bag.

I can't say that I did quite what he asked. The bunk was cramped and quite hard. But I had little time to think about it. Before I knew it, the doc had my feet up and was swabbing off my arm. Luki was assuring me that it didn't hurt at all and that she was positively looking forward to her turn.

I was a bit tired of having her tell me things didn't hurt, but before I could come up with a snappy retort, I began to feel drowsy. It was just too much trouble to continue the discussion. I was aware of the doctor fussing about with appliances at the head of the bunk and of Luki waving to me from the door. The cabin lights dimmed gradually. Or was it the drugs taking over? I couldn't be sure.

The next thing I knew, I was standing on a barren heath. At least, that's how the commentator inside my head described it. Rolling hills under a lowering sky. Low, sparse vegetation that the mental prompter termed heather. And far across the field a line of men was passing. Soldiers. Primitive people such as one might expect to find on a primitive planet. I had the odd feeling that I was experiencing another briefing. Somewhere inside my head a voice droned on about what I was seeing. It was a while before I remembered about the suspension instruction I had agreed to try.

As the line of men approached, I saw that they were all strangely dressed. They wore short, knee-length skirts, surmounted by leather or metal shirts, and they all carried swords and some had crossbows. They were a weathered and forbidding lot and I was glad that I could stand aside unnoticed and observe them.

I could hear what they said, too, but their language was so strange that it took me some time to understand it. However, I followed along as that mind guide I had acquired endeavored to explain matters, and soon I found

myself so absorbed that I longed to find out what would happen next. Presently, we all, soldiers first, me after, approached a castle, complete with towers and ramparts and a fortified gate. A beautiful woman came out and held a long discussion with one of the men, whose name I learned was Macbeth.

I followed on into the castle and watched the feasting and dancing. The women all had long robes and lengthy braids of hair, while the men wrapped bright capes around their shoulders. But they still wore short skirts, which struck me as an odd form of dress to choose for such a cold place. The women were far more sensible about it!

As I became used to the language, I got a real shock —I heard murder being planned. Well, it sounded worse than if you picked it up from a tape. And the victim was an old, harmless-looking man, too. If this was the sort of thing they studied in history and literature, I was just as glad that I'd missed out on it. And since I couldn't warn the victim, I decided to leave. I made my way to the gate, and as I walked out, I heard a wailing arise from the castle behind me. The murder must have really happened!

Now I wandered across that desolate heath, wondering why they ever built a castle in a place like this and wishing I had been firm about not having any suspension instruction. This brought memories of my parents. My mother, whose old advice had really gotten me into this. I seemed to hear my father's voice saying:

"A little less time in the lab, son, and more on the field. You don't seem to know how to hold onto a ball yet."

And my mother: "Always remember, moderation in everything, Gil. A sound mind in a sound body."

Well, why hadn't they taken their own advice? If they hadn't spent so much time in their lab! If they'd been out on a field the day it blew up! I switched off that mental image as I felt my throat beginning to choke up. But I couldn't get away from it entirely, as I'd done for so many months. In place of the burning lab, I saw the many X-Tee creatures that my father had brought home for me to study. The books and tapes he'd laid out at my questioning. And I remembered that time I'd heard them talking late at night.

"Gil's got a mind like a steel trap... a memory like a sponge..."

So I didn't care if I was laughed off the field at school; if I couldn't hold onto the ball. I'll show you, I thought! I can learn anything you throw at me—in half the time!

But still I heard my father's voice saying, "Can't hold onto the ball... the box... the ball... the box." And then it all came back to me. The lab and the box and the Toxic Toad. And the terrible pain and knowing that this was the end.

I started to run across the rough, stony ground and all the time my father was saying, "A little more time on the field!"

Well, I was in the field now. Stumbling over a very peculiar field. And my parents had nothing to do with this. They weren't supposed to come into it. As I shut them firmly out of my mind, I became aware of the singing. Not very cheerful singing, that much was clear. There were several high, rather piercing voices.

I came over a little rise and saw three figures weaving about in the pallid light of the moon. Whatever they were doing, at least it was not murder. A little encouraged by that thought, I went closer to see that they were three old, bedraggled women, dancing around a kind of pot that rested on a glowing fire. Every once in awhile one of them threw something into the waiting kettle.

"Double, double, toil and trouble," they sang. "Fire burn and cauldron bubble!"

I had no difficulty in understanding the words now, though the sense of it was something else. Still, it would pass the time. Time... time... how much time had passed, I wondered? It all depends what time you're talking about, Luki had said. Earth time, Estrada time, galaxy time, ship time...

The old women were still singing:

Eye of newt and toe of frog,

Wool of bat and tongue of dog...

Crazy!

Suddenly they stopped, as one old dame shrilled at the others:

"You got it wrong, Sister! Not toe of frog! *Toad or* frog! And toad's better. Toad... Toxic Toad!"

And then what did she do but reach into the pot and pull out a Toxic Toad! She whirled around with the nastiest grin I ever saw and threw it right at me!

Then all three witches began to pull out Toxic Toads to throw. What's the matter with them, I thought? I'm not here. They're not supposed to see me. But as the toads hit the ground, they began to jump and hop— and all in my

#### direction!

Naturally, I backed away until I tripped over a stone and started to fall. It's the same thing over again, I thought! I'm going to be bitten again! Only this time Luki and the professor aren't here. There's nobody to give me the antidote. I'm finished!

From far away I heard my father's voice saying, "A little more time in the field!" And somehow I regained my balance and ran. And as I ran, with the toads right behind me, I heard the cackle of insane laughter from the old women. Then Luki's voice broke through.

"What are you afraid of, Gil? You're immune now. They can't hurt you. Turn around and kick them away. Only save me a couple for the experiment."

Panting heavily, I slowed up, and there she was beside me. I put my arms around her and clung to her, trying to believe she spoke the truth. But there was something else.

"Perhaps I'm immune, but you aren't! They can bite you. But I won't let them!"

Somehow I picked her up in my arms and ran, straight for a side gate of the castle. All the time I knew that the toads were right behind us, a crimson wave of leaping, rushing horror. Luki fought against my hold.

"Put me down! I need another specimen for the project!"

I swung around to slam shut the postern gate, but the toads were coming in under it. So I about-faced and leaped for the stairs, dragging Luki with me. It was a winding stairway, leading to the top of one of the towers. We came out and looked down over the battlements. Below were the three old women, waving and laughing and screeching. While a regular torrent of red Toxic Toads hopped through the open gate.

As I turned toward the stairway up which we had come, the first toads appeared. To leap over the battlements was sure death. To stay where we were meant getting bitten. I put Luki behind me and prepared to kick off our pursuers. And at the same time I began to call for help. I couldn't stop myself. There was nothing more I could do, and I called and screamed, and then I felt Luki jerking at my arm.

"What is it? What is it?" she was saying. "There's nothing to be afraid of. You're perfectly safe. You're with us and nothing can hurt you!"

And as though she were a witch, too, and could con-trol the things about us, the whole scene vanished. I was back in my bunk on the interstellar

spaceship. Luki leaned over me, wiping my face with a damp cloth. Behind her I saw the ship's doctor, a syringe in his hands and a worried look on his face.

"Never had a reaction like this before," he was saying. "He must be allergic to something. Better leave him awake the rest of the trip."

With an effort I found my voice. "How much more trip is there?"

"Only about a week." Luki held out a cup for me to drink from. "I'm up for the last time, and I'd just finished checking the toads when Doc said I'd better look in on you. Said you were acting abnormally. Whatever was the matter?"

"Some time I'll tell you. But right now I'd rather forget it. That was a heck of a tape you picked out for me.

The doctor was disconnecting the apparatus from my bunk. "You asked for Shakespeare," he reminded me, "and all the men say that's his best. Well, take it easy, and when you feel up to it, there's chow in the mess room."

Chow—food—it was the last thing I wanted. I looked at Luki, following the doctor from my room, and I sighed with relief. But it was a long time before I dared let myself sleep again.

# TODAY IT'S THURSDAY

When I felt strong enough, I made my way to the mess room. Perhaps some food would put me back in good shape. After all, it had been a long time since I'd eaten.

By now the ship was approaching orbit and everyone who would be involved in the landing on Thursday was awake. The little mess room was crowded, and I joined Luki and the professor at a small table. The ship's doctor was there, as was a large, angular man, who stood up and made a place for me.

"This, I take it, is the celebrated Dr. Abbott," he said, waving a spoon at me as I squeezed in between him and the professor.

I had the feeling he was kidding me. I don't suppose he was very old, really. But I was very young at the time and everyone looked old to me. Everyone except Luki. And I was suspicious of the jokes of older people. Probably he had heard about my unfortunate reaction to suspended animation *or* unconscious learning or whatever it was that had gone wrong.

But he didn't seem to be kidding at all. He held out his hand warmly.

"Meet Dr. Robert Gosney," said Luki. "We picked him up at the last stop. He's been on vacation from Thursday."

"Urn, yes," said Dr. Thursby. "One of our medical staff. He's been impatient to have you wake up for some reason. Didn't give a hoot if 1 ever woke up though."

"But I know all about *your* work and theories!" my new friend told the professor. "Been studying your reports ever since I took up residence on Thursday. But him—you *are* the Gillian Abbott whose report appeared in *X-Tee Biology* awhile back?"

"Oh, that," I said, as I realized that this unusual person was taking me seriously. "That must have been my doctoral thesis. I heard it might be published there, but I guess my copy missed me when I left Terra. You don't happen to have it around, do you?"

"Certainly, I have my copy. Reading it for the third time. But how did you happen to get onto this theory of yours back there on Earth? They tell me you've only recently left Terra."

"Why don't you let the poor boy eat before you start pumping him?" asked Luki. "Remember, he just came out of suspension. He must be starved."

I looked down and saw that a dish of space fare had been put in front of me. No choice on this ship. But I did indeed feel starved, and began to spoon up the rich stew.

"You ought to know better than that," Dr. Hornby was scolding. "You're a doctor—and he had a bad time in suspension. Give him a chance to get back to normal."

Dr. Gosney looked at me with a worried frown. He had a loud voice which tended to get out of bounds with the least argument.

"Had no idea. Nothing serious, I hope."

"Never had anything like it before," said Hornby. "Read of such cases in the literature, but never in my experience. Won't look good in the log. What seemed to be the matter, young man?"

That was one thing I did not want to remember or discuss. I looked at him with my mouth full and shook my head.

"Can't see that you're being any better than me!" cried Gosney. "Asking him questions when he's supposed to be eating!"

Dr. Thursby regarded me thoughtfully as he spooned up hot stew. "Our Dr.

Abbott is an unusual young man. Fresh out from Terra and a Ph.D. at seventeen. You've got two odd factors there. And then he survived an encounter with one of my Toxic Toads *and* a shot of our new serum. Perhaps not everyone could have done that either."

"You did what?" demanded Dr. Hornby, staring at me in open surprise.

"You mean to say, you almost killed him off—and before I ever met him!" cried Dr. Gosney, and buried his face in his hands.

"It's quite a story," said Luki. "One of them bit him in our lab."

"That's how I happened to become a member of this project," I said.

"He's a valuable member," Luki went on. "He's the first person for whom our antidote has worked."

Between the two of them, Luki and Dr. Thursby outlined my unfortunate experience in their lab and the eventual happy outcome. By the time they were done, Dr. Hornby was frowning.

"What a traumatic experience! No wonder you failed to adapt. Perhaps we should have passed up suspension for you. But nobody told me."

"I had no idea it would make a difference!" cried Luki. "Of course, I should have told you. Oh, I'm so sorry, Gil. I hope you didn't find it too bad!"

"No telling what it's done to his subconscious," said Hornby. "Just what were you dreaming about, if I may ask?"

"And I'd hoped you were getting over your phobia," sighed Thursby. "We'd let him off all work with the animals for the time."

At their persistent urging, I described my dream of being chased by the toads through Macbeth's castle. But I left out the part about Luki. As it was, she was all sympathy.

"You poor thing! I can imagine how frightening it must have been. You certainly picked out the wrong tape for him, Doctor."

"No tape at all would have been best," said Hornby. "But I was not informed about this." He continued to watch me with interested speculation. I might almost have been a monster myself.

"You should have chosen a learning tape," said Thursby. "Nothing frightening in that. Extraterrestrial Vegetation. That's one of your interests, isn't it? Or the one I had on stellar properties. Very informative indeed."

"You may have missed something there," said Dr. Gosney. "You know what his thesis was about, don't you?" He looked round at us, and when he saw only interested ignorance, he took the opportunity to lecture. "Nobody keeps up with the scientific journals. Very lax. How can you know what's going on in your field —in related fields? His paper is titled, 'Life Span Variations from a Selection of Stellar Systems.' How he ever got the material for it back there on Earth, I'll never know. But his theory is ingenious."

As Gosney paused to draw breath, I found that they were all looking at me.

"My parents ran an X-Tee lab," I muttered. "They used to bring home material for me to look at—ever since I was a kid."

"But how many kids would come up with this?" cried Gosney. "You must all read it! I've got it in my cabin." He was turning out his pockets in a futile search, and showed every sign of running off to get the journal.

I'm not one to evade the spotlight, but just then I would have preferred to forget the matter. That thesis was far behind me and as well forgotten. It had got me what I wanted—a degree and the trip to Estrada— and an awful lot had happened since. I was relieved when Luki intervened.

"Can't you just give us the gist of it, Dr. Gosney? There's hardly time for us all to read a thesis now."

"Oh, the gist is easy. Fits right in with some of my ideas. But the proof's another thing. That's the whole paper. That's what counts."

"Just the gist," said Dr. Hornby, pushing back his chair.

I could see that he wanted to be polite to me, but that his duties called him elsewhere.

"Well, the point of it all—and I hope the author will correct me if I'm wrong—is that the type of radiation emitted by the primary determines the length of life of the species evolving on any planets in the system. Oh, yes," as he saw me about to open my mouth, "and the distances from the star and a few other such matters as atmospheres, etc., etc."

"I have a feeling I've heard that somewhere before," Dr. Hornby was now standing and he smiled at me. "But I'm sure the young man has some new ideas on the subject. Now I've got to run along. I do hope you suffer no ill effects from the suspension tape. Just give it time and all symptoms should wear off. And I'll make a point of looking up your paper. We get the journal in the library, though somewhat spasmodically, you know."

As the ship's doctor took himself off, I heard Dr. Thursby snickering behind his napkin. Apparently, I was not being taken as seriously as I thought, and I hastened to finish my stew. But then I realized it was not me he was laughing at, but Dr. Gosney.

"Now I see why you've made such a hit with our doctor," he said to me. "Forgive me. I'm sure it's a fine paper and I intend to read it. But our Goz is a fanatic on the subject of longevity. He's one of these doctors who believe immortality will be found in the stars. Instead of concentrating on the problems at hand, the plagues and diseases that may afflict us as we spread out across the galaxy, he behaves like the early Spaniards and constantly searches for the Fountain of Youth. Of course, the poor man has little opportunity for looking, as he's been marooned on Thursday Planet for—what is it, five years, Goz?"

I thought Dr. Gosney might be deflated after this bit of banter. But he merely laughed along with the rest of us.

"Nobody takes me seriously," he said, "or my ideas. So of course, when I came across this remarkably perceptive article... You got right to the heart of the matter, Gil. And it's not all theory by any means. He's got facts!"

It is always encouraging to have your work understood. My opinion of Dr. Gosney went up tremendously and at the same time I decided that Thursby must be some kind of old fogey, so buried in his toad experiments that he couldn't see anything else in the cosmos. The name of Gosney might be better known than Thursby when the final records were in. Of course, I confidently expected to be better known than either of them, but that would come with time. Now I realized they were waiting for me to say something about that old paper.

"I was fortunate in having specimens to work on," I said. "You see, my parents—well, I got to comparing the material they'd given me. And if you have turtlelike creatures from one system that live to a certain age, and similar specimens from another system that have a different life span, and you correlate the data about the primaries and the atmospheres, etc., you can work out a formula of a sort. Bur I never thought about man in connection with it all. I did put the Earth into the tables, but only to consider the life spans of our oldest turtles."

"But you should always consider man," said Dr. Gos-ney, and his voice rose, so that others in the mess room stopped talking and turned to look at us. "Man is an animal, and what affects other animals will affect him."

Dr. Thursby winced from the loud voice. "Oh, very well, very well, Goz," he said, and I could see that he regretted having got into the argument.

"Discuss it with young Abbott at a later time. Now I do think he should be allowed to rest and prepare for docking. Not too much time left, you know."

And my boss pushed back his chair and left the room, muttering to himself as he noticed the attention centered on our group.

Luki stayed with me and made a point of seeing me to my cabin, all the while frowning at Dr. Gosney, who followed us, offering apologies and causing more confusion all the time.

I must say, I was glad to be alone again in my room with a chance to rest and sleep. Now I had so much to think about that memories of the bad suspension experience were fading into the background. So my paper had really been published! Usually such theses were allowed to lie around in the editor's office, waiting for a hole to fill at the end of the journal. Evidently, they had thought it important. Probably more people than this rather crazy doctor were already giving me credit for a major breakthrough in science! My spirits rose and I told myself that any minor mishap, such as dropping a box of toads, would quickly be forgotten in view of this scientific triumph. So I fell asleep and dreamed of an audience of respectful scientists waiting to hear me lecture. The only hitch was that I was not quite sure what I was going to say.

A few days later, the ship was in orbit around Thursday Planet, and there was a lot of hurrying and scurrying in preparation for sending down the landing shuttles. Together with our baggage and the colony supplies, we were loaded into the shuttle rockets. As I shook hands with the captain, Dr. Hornby drew me aside.

"Better get a good rest before you take on any real work. I hear they've got all sorts of celebrations planned down there, welcoming the returning hero." He nodded toward Dr. Thursby, chatting with the captain. "He discovered the planet, you know. And he's coming back with the solution to all their problems. But don't let them push you too fast. I'd hate to see a young man like you break down at the beginning."

I assured him that I'd every intention of taking things easy, and then I followed Dr. Thursby and the rest of our party into the shuttle and found that I was sitting right next to the voluble Dr. Gosney.

As we dropped out of the freighter and began our entry orbit, I mulled over the doctor's words. So that was what he thought of me! A guy on the verge of collapse! Well, if he'd take the time to read the latest journals in his library, he might think otherwise. But no doubt he was one of those doctors who never crack a book after they get their degree—who fail to keep up with the march of science. At least the men I was working with weren't like

that. I looked around at Dr. Gosney (call me Goz, he had said as we were finding our seats) and found that he was staring out the window at the glimpses of the planet as we swept in and out of the clouds. He moved to let me peer past his shoulder.

"Well, there's our planetary prison for quite some time to come," he said. "There's the Heat Barrier—all that brown, see?"

I saw all right. At one point we seemed to have nothing but desert below us. Surely, nothing could cross that barren waste or survive the great heat. Then we swung out and away and I saw ocean beneath.

"I've studied the tapes," I said. "It does look impressive."

Gosney laughed. "That's hardly the word! We have a unique condition on this planet. Two separate halves with no chance of communication. I still think we could fly a flitter through the Barrier if we did it at night with enough air conditioning in the cabin. Or they could put down a shuttle from space orbit. But nobody wants to bother. After all, it's mostly water in the other half. We've taken over the best part to colonize and nobody gives a hoot about what's down there." He waved at the heaving seas far below.

"But what would be there?" I asked. "Is anything there?"

"That's one of my weaknesses," laughed Gosney. "Show me something and I'm not happy till I know all about it. I'd have been glad to spend my free time exploring the other half for them, but they sent me off-world instead. Cheaper, they thought."

"Don't let Goz get you involved in any of his crazy ideas!" Dr. Thursby spoke from the other side of the shuttle. "He gets a new one every other day. If there was anything to explore in the other hemisphere, I'd have been there years ago. Nothing but a few scattered islands. Not worth the trouble and expense. It's all been mapped from space."

"But it's still a mystery," said Goz. "And I love mysteries. Or rather, I hate to leave them unsolved." Suddenly, he grasped my shoulder, his excited grip causing me to cry out. "Look there! Did you see that? Over to the right—a column of smoke, I swear!"

His words caused Luki to rush to our window.

"Where? Where? I don't see anything!" she exclaimed.

"We're swinging around. You can see better from your side now."

We all moved over to the professor's window, causing the pilot to come on

the intercom with orders to keep seated and fasten our belts.

"Coming in to land in a few minutes," he barked. "Are you all crazy? Stop rocking the boat!"

"The only crazy one is Dr. Gosney," complained the professor, as we regained our seats. "What you saw was nothing more than morning mist. You've a great imagination!"

"Nonsense!" Goz insisted. "It was smoke. Going straight up with a little curl at the top. I know smoke when I see it. You saw it, didn't you, Gil?"

I hated to let him down, but I had not been quick enough to see whatever it was he had seen.

"Well," I temporized, "it might have been smoke. But there are a lot of clouds in that area."

"Clouds nothing!" Goz refused to be put down. "There was smoke. And where there's smoke, there's fire from some cause. Of course, it could have been a natural cause. Lightning or volcanic action. Any volcanoes in that hemisphere, Dr. Thursby?"

But the professor did not deign to answer. We had swung back across the Heat Barrier again and now the southern hemisphere of Thursday lay beneath us and rushed up as we came in for a landing. Here was land aplenty. Forests and grassy plains swept past, and I began to see evidence of cultivation.

There were no cities yet on Thursday. It was a frontier economy, still largely supported from off-world and governed by the military. Farming and ranching and mining. And hard work for everyone. I had one glimpse of the desolate polar mountains and then the landing field came into view and we were being told again to fasten our seat belts.

We planeted at Thursday's one spaceport, a great clearing in the forest, dotted with blackened pits where other ships and shuttles had touched in the past. There were few of the amenities of a civilized port—no robot carriers or mechanized walkways. After some preliminary conversation with port officials, the ramp was lowered and we were invited to debark.

Carrying our hand luggage, we made our way down the ramp, while the crew scurried about, opening hatches and swinging out booms to unload our laboratory equipment and the supplies for the colony.

I followed Luki and the professor, with Goz bringing up the rear, and was immediately struck by a wave of heat. I had been so long away from a

planet where natural weather is allowed to run rampant that it took me by surprise. The next thing I was aware of was a roar of sound coming from the direction of the few small buildings at the edge of the field. People were shouting, accompanied by music.

"Well, I see they've rolled out the carpet for you, Thursby!" boomed Dr. Gosney behind me. "I know that welcome's not for me!"

Luki and I hesitated beside our boss, who blinked uncertainly in the searing light.

"Where's Northcutt?" he demanded of men who hurried past, bent on emptying the shuttle as soon as possible and getting back for another load. "Why isn't he here? Keep an eye on those crates, Luki. See that nobody damages the toads. Ah, here comes somebody at last!"

A group of men approached us with all the dignity and precision of a military escort. They paraded up to our group, and while three of them stood at attention, the fourth stepped forward and seized the professor's hand.

"Dr. Thursby!" he cried. "We've waited a long time for this day. Welcome back to your planet. I trust you bring with you the solution to our problems."

"Ah, Colonel Northcutt! Of course, of course. I see the port's still here. Looks much the same as when I left it. My assistants—Miss Sorrell and Dr. Abbott. And as you see, our wandering medic is back."

"No getting rid of me, I fear!" cried Goz, as we all shook hands.

But Thursby had his mind on other matters. "Get over and check those crates, Luki! We've got a precious cargo with us, Colonel—Can't let anything happen to it. Now what were you saying about, ahem, solutions? Problems?"

He slipped his arm inside the colonel's, as with an old friend, and they walked off, followed by the honor guard, with Dr. Gosney trailing behind. Luki pulled my sleeve.

"Come on. We've got to inspect the toads."

We went back to where the cranes and davits were swinging down a variety of crates and bales, and began to search for our familiar boxes. There was no sign of them. After going over the collection twice without success, Luki cornered a busy crewman.

"Where are the boxes that were marked for special handling?" she demanded. "You know, the ones with the live cargo?"

"Not down yet," said the man, trying to sidestep her. "No room. Next rocket."

"But we gave explicit instructions that they were to come with us on the first rocket!" she cried.

"Next rocket! Next rocket!" growled the man, as he ducked under her arm and ran up the ramp to the ship.

Luki and I looked at each other. I felt that I should be doing something, but I didn't know what. I might have run after the crewman, but the ramp was folding into the ship and we were being warned by the loudspeaker to stand clear. A small mech-truck moved past with the crates and bales under the supervision of two hefty porters.

Luki bit her lip. "We'd better tell the professor right away."

Well, at least I could help that much.

"Come on!" I swung her up onto the van before it gathered speed.

Perched atop the colony's supplies, we rode across the field. I was glad that I was spared the walk. Already the heat was getting to me, and I looked forward to the chance of changing into the tropical kit they had advised me to buy on Estrada.

When we reached the port buildings, we found Dr. Thursby surrounded by a crowd. Dr. Gosney must have slipped away to his own quarters, but the professor could not escape the enthusiastic welcome. The air was bright with electronic flashes as his historic return was photographed, and groups of colonists pushed forward to shake his hand. Colonel Northcutt tried to guide him through the press to the waiting groundcar.

"That's enough pictures!" he ordered. "You'll have another chance tonight at the dinner honoring Dr. Thursby. Those of you without tickets are welcome to come later and hear his talk. It will be carried on the intercom, too. Now make way there. Let's not trample him underfoot before he has an opportunity to accomplish what he came for."

The crowd laughed and gave way. By hurrying, Luki and I were able to follow in their wake and catch up with the scientist just as he was about to step into the car.

"Oh, Dr. Thursby!" gasped Luki, quite out of breath. "I thought you ought to know. The live crates failed to come down on our rocket. The man said they'd be coming later."

The professor stopped in shocked surprise.

"What's that? But I gave orders! Colonel Northcutt, if anything happens to my experimental animals, my work is finished before it's begun! We don't have the equipment to repeat it here. I'll have to go back and start over!"

Colonel Northcutt turned to one of his officers.

"Captain Huddle, take care of this!" he snapped. "Get on the com. See what nonsense is going on up there. Get the stuff down and get it down safe and fast. Perhaps one of your assistants can go with him, Doctor."

"I'll go!" said Luki.

But I pushed her aside.

"Miss Sorrell needs a rest and should get in out of the heat. I can do it with the officer's assistance."

Thursby looked at me and hesitated. I could see that he was wondering about my recent nightmare. But then he made up his mind. After all, he'd recruited me to his project. He was going to have to live with that decision.

"Very well," he said. "Don't leave here till you have all the material safely with you. I'll be waiting. And you come with us, Luki. You do look a bit wilted."

She went with him reluctantly. As for me, I felt as wilted as she looked, but I turned and followed Captain Huddle into the spaceport office and listened while he barked orders at the intercom and swore colorfully at someone on the other end. I hoped it was the captain who insisted that his passengers travel in suspension.

After that we waited in the now deserted building till the second shuttle came down, when we made our way through the heat to the opened hatch and shouted orders for the careful handling of the live cargo.

"Just what does the old boy have in there?" Huddle asked me, as he mopped his face and watched the collection of crates being piled onto a truck.

I took a few moments before I answered, and I guess Huddle thought it was the heat. Something told me I had better leave all scientific disclosures to the professor.

"Urn—you know—animals to fight your plague of toads. You still have them, don't you?"

"Do we ever! And no matter how many you kill, there are still accidents all the time. I've applied for off-world transfer, before anything happens to me. But that's not so easy to get. The word's got around. Nobody wants to come here. Surprised to see Doc Gosney coming back. It's my belief that unless the professor has a solution, they'll have to close this colony down. But you say he's got something to fight it? A predator? That's great!"

Right then, as I climbed up on the truck beside the captain and we zoomed off across the burning field, I felt that perhaps closing down Thursday Planet might be the best answer. Still, there must be some interesting aspects to this world. I could glimpse a towering forest behind the little settlement. It must harbor many good study species. Already, while waiting for the shuttle to put down, I had observed an ant hole in the dirt of the field. A quick look had told me the ants were quite different from anything on Terra. My interest and curiosity began to rise. I knew the colony must have cooling devices and other forms of comfort and that in a short time I would undoubtedly feel differently about this world.

Captain Huddle directed the truck to the building set aside as our laboratory, and there we unloaded and stacked the crates. I wondered what the officer would have said had he known that his chances were quite good at the moment of having a "toad accident." But I said nothing. And after I had counted the crates and made sure everything was in order, I followed him through the town to the colonel's headquarters, where he assured me we would find comfort and refreshment.

At that point, I told myself, I could use a little of both.

#### **HOME** IS

### THE HERO

The town seemed deserted, but Captain Huddle assured me that I would find the colonists gathered around the headquarters building. Everyone was anxious to catch a glimpse of Dr. Thursby and to hear what solutions he had brought with him. And indeed, as we approached headquarters I began to hear the buzzing of a crowd.

Suddenly this sound was drowned out by a shout from close at hand.

"Hello there, Gil! Get everything straightened out!"

It was Dr. Gosney, striding hurriedly toward me around the corner of a house, shouting and waving as he came. My escort stopped quickly and a polite but resigned expression spread across his face. The two shook hands perfunctorily.

"I see you got back on schedule, Doctor," said the captain.

"Ah—yes, yes. Came in on the same ship with Gil. On your way to the banquet, I presume? I was going to pass it up. But you know what space food is. Better take advantage of good chow when it's offered, no matter what the provocation."

"I can't imagine why you'd stay away," said Huddle. "Sure to be a place reserved for you. I was to bring Dr. Abbot there as soon as we secured their equipment in the new lab."

"So I see. The new arrivals. Every facility for them now!"

Dr. Gosney's voice held hurt and anger and it began to rise in volume accordingly. I was sure this scene would have attracted an audience had not the entire populace been concentrating on the professor's homecoming.

"Is anything wrong?" I asked, trying to be sympathetic.

"Wrong!" he fairly bellowed. "Wrong! I'll say there is! I've been urging them—the authorities—the colonel—ever since I first came here, to let me explore the northern half of this planet. But no, no! It wasn't worth it, too expensive—every excuse. I offered to spend my leave doing it, but they insisted it was impossible to get there. And do you know what they've done now? They ship me off on a useless sort of leave —and then they send an expedition beyond the Heat Barrier! Without me! The frauds!"

"Yes, that was Chuck Witherspoon's idea," the captain explained. "One of our flittermen. Best pilot we have for an aircar. He figured that with the air cooling in the cabin and flying at night, he might make it. And he did! Just as you suggested, Doctor."

"But why wait till I was off-world?" Goz was almost weeping with frustration. "It was my idea. And instead they send me off on this useless vacation!"

"You should know the military by now," said Huddle. "That's standard procedure. I put in a request for transfer almost a year ago. But of course I'll never get it. I should be like you and spread the word that I don't want a vacation, couldn't bear to leave the planet."

This idea struck the captain as being so funny that he began to laugh, but I could see that Dr. Gosney was not amused.

"That's not all, Gil," he said. "Do you know what that fool Witherspoon found down there? Quite as I predicted. He found *people*. People living there! Nobody knows where they came from. It's caused a sensation. They're

bringing in specialists. But people are my business. They've taken my idea, and everyone else is cashing in on it! It's unethical—it's detestable! That's why I don't give a hoot for their banquet. They can all go to blazes!"

"Well, if you take my advice, you'll come along anyhow." The captain had stopped laughing. "Won't hurt anyone but yourself by staying away. Miss all that good chow. And if you stick round, they may let you go down there the next trip. Personally, I can't see why you'd want to. Suppose the aircar breaks down and you're dumped inside the Heat Barrier?"

"Suppose a toad bites you tomorrow?" suggested Goz, and I saw the captain wince. "Well, I'll take your advice since I now have Gil to sit with. Only intelligent man on this planet. Did you know that he's written a paper that's bound to become a classic?"

Goz linked his arm in mine and we followed the captain, now suitably impressed, I noted, as he led the way to headquarters.

It was obvious which was the building long before we got there. A subdued roar of many voices reached us first, and then we saw the crowd gathered before the entrance. They were waiting to hear Dr. Thursby speak. Apparently the feast of welcome was about over and the speeches would soon begin. When they saw the captain's uniform, they moved aside and we were allowed to enter.

The Thursday settlement had grown beyond the stage of prefabs and expansible shelters. Most of the buildings were now constructed of native timber from the surrounding forest, but I noticed that they were caulked and painted with duraplastic, a protection, no doubt, against the toads.

We passed through the entrance lobby and down a hall, to find ourselves in the officers' mess, which had been colorfully decorated for the occasion. A long table extended the length of the hall, and the lucky diners were crowded together on the benches. At the far end, at a table set crosswise, Dr. Thursby was sitting, flanked by Luki and the colonel.

The place was comfortably cool, despite the crowding, and for the first time I felt at ease and began to develop an interest in the food displayed on the table. Most of the guests had finished eating, but there would still be plenty for me and my two companions.

The colonel was speaking, just finishing his words of welcome and introduction for Dr. Thursby.

"And so I give you the discoverer of Thursday Planet, who has returned in good time to save us from the risks and inroads of..."

His words were drowned out by applause and shouts for Thursby. The professor stood up, and as he did so, he looked over and saw me at the door between Goz and Captain Huddle.

"Ah, Dr. Abbott!" he cried, and all eyes turned to stare at me. "My assistant has arrived. I presume everything is taken care of? Let him come up here and be served."

The colonel gave orders, and soon I was seated at the head table between the doctor and the captain, full plates of food were pushed in front of us, and our glasses filled with a cooling drink.

"Everything all right?" hissed Thursby to me. "Nothing to worry about?"

"Oh, absolutely," I assured him. "They're all safe now. We stacked the boxes in the house assigned to us. A very adequate building, I might add."

"Excellent!" cried Thursby, and turned with explanations to his audience. "A slight confusion at the spaceport. But it's been set right now. If anything had happened to the experimental animals, well, I'd have to go right back and start over! So you can see how important..."

"You brought animals with you?" The colonel was trying to nudge the professor into his speech.

Captain Huddle interrupted his eating. I could see he was hoping to make the most of what little he had learned while working with me.

"Predators! That's what the scientists call them. They've brought animals that are going to kill off all the toads!" And he winked at Dr. Gosney, as though the two of them shared some great secret.

A sigh of expectancy went around the hall, but the professor glared.

"Who told you that?" he demanded.

"Why, your assistant here. Dr. Abbott."

"So you've found an animal that can deal with the toad menace? Good show, Thursby!" The colonel beamed with military approval.

Dr. Thursby transferred his glare to me. "Dr. Abbott!"

"But I didn't!" I protested. "He suggested it, and as I thought any statement should come from you, I just didn't say anything."

"Quite right." My chief relaxed and prepared to get back to his speech. "You did just right, Gillian. Trying to pump my assistant, eh? Well, I can assure

you that finding another animal that could deal successfully with your toads might well end with your being saddled with something far worse than what you've got now." He paused to beam at his audience, most of whom gave every evidence of not believing a word he said.

"But then what is in your precious crates?" demanded the colonel.

"I'll get to that, if you'll let me proceed with my speech. No, my friends, we have a much simpler method. We are letting the toads deal with themselves. We have used a technique developed long ago on Terra when trying to stamp out biological plagues. And very effective it proved to be in many cases. We have reared a large number of male toads and then made them sterile by radiation. In every other respect these male specimens are normal, but they cannot fertilize ova in the females. These toads will now be released in the areas of infestation where they will mate with the native females, which will then produce infertile eggs. In a short time you should find that the toad population has dropped off surprisingly. Now if we can have the attention and cooperation of all the colonists..."

But the professor never finished his outline of what he wanted the colonists to do. His speech was drowned out by a rising murmur of consternation and dissent.

"You mean to say," Colonel Northcutt's stentorian voice boomed over the rising hubbub. "You mean to say, you brought Toxic Toads *to* Thursday Planet!"

I saw the professor's look of outraged stupefaction and the silent disapproval of Luki. Then I glanced at my companions. Goz was sitting back in his chair with a wide grin on his face, as one only too well acquainted with military obtuseness. On the other side of me, Captain Huddle sat frozen, all color drained from his face.

"Then those—those crates I helped you carry," he whispered hoarsely, "were full of *toads?*". As I nodded, the fork dropped from his shaking fingers, he pushed back his chair and fled the room. It was the worst case of toad phobia that I had seen, but I was soon to learn that it was prevalent throughout the colony. And I thought I had been a fool about them! My rising feeling of superiority was cut short by the colonel's pounding on the table for silence.

"This dinner is at an end!" he declared. "I want all of you to go home and I want no talk about this matter. Dr. Thursby and I and several knowledgeable people will discuss it privately. Be assured that a way will be found to deal successfully with our problems. Meanwhile, I am setting an armed guard

around the new laboratory, so that nothing can happen to the scientific material—and nothing can happen to any of you!"

There was a general pushing back of chairs and benches as the people made their way out of the hall. I felt Luki squeeze her hand into mine, and we both edged up close to Dr. Thursby. In the space of a few minutes, his reputation had plummeted from hero to chief suspect. As we followed the colonel out a side door, I saw that the professor's expression was one of complete bewilderment.

# SUMMIT CONFERENCE

If Dr. Thursby appeared openly puzzled and disheartened when we left the mess hall, that was nothing to his confessed confusion after enduring an hour of arguments in the conference room.

The colonel presided over the small assembly, of whom the most vocal were the farmers. There was an especially loud-voiced man, Bawcum, who took it upon himself to voice the grievances of the entire colony.

"We're downright disappointed!" he burst out. "We'd been told the professor was coming with a solution to our problem. Now we hear he wants to turn loose more of these critters among us! As though they haven't made our planet into a deathtrap as it is! I've half a mind to pull up stakes and move to those islands that chap Witherspoon's been talking about!"

There was general laughter at this. Everyone knew that a farmer could not make a living on those small islands. And on the other side of the Heat Barrier! Dr. Thursby looked pained and the colonel banged for order.

"Nobody's going to make your farm into a death-trap," he said when there was comparative quiet. "We're here to discuss the matter and to listen to Dr. Thursby's explanations. Now I want no more interruptions. Yes, madam? If you've got a question, please make it short. And state your name."

"Mustard," said a rough, sunbrowned woman, standing up in the farmers' corner. "Mrs. Emma Mustard. Please, why can't he just put out some poison? Good strong poison that would really work? We'd all help with that, I'm sure."

There was a general murmur of assent from the colonists. The colonel banged again and motioned to the professor, who stood up to face his critics.

"What you don't understand is that if we try to poison this almost indestructible species, we may well end by poisoning everything else on

the planet, ourselves included. They had a similar situation on Terra once, you know. Threw pesticides around so recklessly they nearly contaminated the whole environment. No, my friends. My method may seem slow to you, but believe me, it will be sure. And we will save the ecology of the planet. Just eliminating one entire species is a questionable procedure as it is. We don't know what important function the toads may have in the balance of nature. Not enough study has been done—not nearly enough."

Above the professor's gentle voice arose such remarks as, "Oh, blast the balance of nature!" The colonel frowned, and looking around the room, he noticed Dr. Gosney, sitting next to me. Goz was leaning back in his chair, his long legs extended in front of him and a satisfied smirk on his face. He was the only person present who seemed untouched by the emotional upheaval in the room.

"Well, let's hear from our medical expert," said the colonel. "Perhaps he's been away long enough to get a new slant on the problem. What's your opinion, Dr. Gosney?"

Goz struggled erect in his chair and took on a serious expression. "I was just wondering whether Chuck Witherspoon found any toads in the northern islands."

There was a momentary silence at the unexpected question.

"Well, I hardly know," began the colonel. "There was nothing in his report."

"You mean, he didn't even look!" cried Goz, his voice beginning to boom forth. "Now if / had been there..."

"Yes, we all know that you might have done better," the colonel interrupted, trying to head off a tirade. "But even you, if you'd stumbled on that tribe of people, might have forgotten to look for toads."

"It just shows how a scientist should accompany all exploring parties!" Goz insisted.

"Well, you'll be happy to know that we've already sent experts down there."

"Yes, I know. Anthropologists. Are they going to look for toads?"

"How do I know what they're going to look for!" The colonel was fast losing his temper. "They're going to interview the natives. They'll probably look for toads at the same time. Now I suggest that we're getting away from the subject of this meeting."

But Dr. Gosney refused to be put off. It was too good a chance to air his

outrage and disappointment at his treatment by the military.

"Did anyone tell them to look?" he cried. "I know scientists. We're each wrapped up in our own specialty. And I'm willing to wager that they won't be thinking about toads. And furthermore..." He waved for silence as a dozen people tried to break in. "Furthermore, I'd like to point out that if these people have been living there a long time, there may very likely be no toads for them to contend with. And if there are no toads, the situation may harbor a clue as to how we can get rid of our toads."

With that he sat down, and there was sudden, unexpected applause from the colonists. I could see that Goz had scored and the colonel was momentarily set back. He frowned as he waited for the clapping to subside.

"Oh, very well," he said at last. "I can see what you're aiming at. You want to go down there and stick your oar in. So I'll send you down. You can run the outpost and send us back a report on toads at your first opportunity. But meanwhile, have you any suggestions to offer this meeting?"

Goz was so startled at winning his point that for a moment he seemed at a loss.

"Oh—well. That will be very nice," he said. "I appreciate that. Soon as possible. And as for Dr. Thursby's plan, it seems sensible to me. I've heard of this kind of program. Usually quite successful. And large-scale pesticides are out. Have you ever considered use of a biological agent? Some virus that might attack the toads and nothing else?"

Dr. Thursby smiled. "You're thinking of the rabbits and myxomatosis. Yes, we've been working on such an agent and I believe we've got one. But we're holding it in reserve."

There was more gabble of discontent and Mrs. Mustard's voice rose above it.

"Reserve! Whatever for?"

Now that he had won his point with the military, Dr. Gosney was prepared to take up the challenge for science.

"I can tell you what for," he cried. "At least, I can make a good guess. Let a new microrganism loose on a planet and no one can be sure how things will end. Such a virus may behave one way in its home world and entirely differently on another planet. Right, professor? I'm sure you've tested this bug thoroughly to be sure it's quite innocuous to man. But still one can't be too careful. We wouldn't like to get ourselves quarantined for a space plague, would we?"

"Quite so, quite so," agreed Thursby, trying to insert a word between the doctor's rattling sentences and the farmers' complaints. "As far as we've been able to determine, this agent is harmless to man—in fact, to most animals. Still, you never know, and under the circumstances, I strongly recommend..."

"And we *do* have very special conditions here," Goz interrupted again. "If something concrete isn't done soon, we may have to abandon the colony, in which case secondary or side results will hardly matter. That is, unless we are quarantined and have to stay here! Ha! You wouldn't like that, would you?" He glared at the disgruntled farmers. "So I suggest that we give this first method a try. If it doesn't work, we can fall back on the microbes. Being sure to handle them with great care, of course. And if we've got that settled, I'll be getting off to my new job!"

He rose and looked at the colonel, who also stood and regarded the now silent colonists.

"Thank you, Doctor," said Northcutt. "I think that covers everything. Now where are we going to start the program? Whose farm will be the model for toad extermination?"

Nobody in the farm group moved to volunteer. The low murmur of dissatisfaction and dissent began again. Then Mrs. Mustard stepped forward.

"Since someone's got to do it, I'll volunteer my farm," she said. "It's way out in the back country where it won't matter so much if something goes wrong. And I would love to get rid of all the toads that's there."

"There you are!" cried Dr. Gosney. "You've got your pilot program. Soon as it works for her, you'll have colonists begging for your services."

"Then it's decided," said the colonel brusquely. "Huddle, get directions to that woman's farm. Tell her Dr. Thursby will be down with his equipment in a day or two. And get the rest of these people out of here. I'm sick of fools wanting a miracle. Space wasn't won in a day."

As the captain ushered the colonists out, Mrs. Mustard slipped past him and approached the professor.

"Please, sir? I wanted to ask—I won't have to handle your toads, will I? Because I just couldn't! Every time I see one, I run for the shovel!"

Dr. Thursby beamed at her. "Quite understandable, Mrs. Mustard. We appreciate your help. Believe me, you'll never be sorry. And you won't have to do a thing. You can stay in the house the entire time."

"Oh, I wouldn't do that!" she cried. "I'll show you over the whole farm. Come along down any time. I'll make you feel at home."

"It may be just my assistants who come," he told her. "Miss Sorrell and Dr. Abbott."

The woman looked at us and her eyebrows rose. "Them!" she exclaimed. "Why, he's just a boy—and she's..."

"Young people, yes. But they're both experts at handling the toads," said the professor. "Every bit as good as I am."

It was the first I'd heard that Luki and I were to operate alone, but when I glanced at her, she seemed to know all about it. I watched Mrs. Mustard as she moved off after the other colonists, and I thought that she had a lot to learn. Hers was an attitude I had encountered frequently among the uneducated. Just then, Dr. Thursby called, and I saw that I was expected to join the little group drawing up chairs around a table. Colonel North-cutt was at the head, and the professor, Luki, and I sat along one side. Facing us was Dr. Gosney, who was joined just then by a small, wiry man in coveralls.

"Just in time, Witherspoon," said the colonel, and went on to introduce us all to the flitterman. "You've had a session with Dr. Gosney already, I believe."

"That's right," said Witherspoon, nodding to each of us in turn as our names were mentioned. "I guess he thinks we should have put off our try at the Barrier till he got back from off-world. But you can't have everything, I say. Would have been glad to go on vacation myself instead of him!"

"Well, your turn will come," said the colonel. "Right now we've got several overlapping problems here and we want to get everything straightened out. Your next flight is tomorrow, I believe. Can you take two men along with you?"

"Two!" cried Witherspoon. "It'll mean leaving out a lot of supplies. Which two?"

"Why, Goz, of course. And Dr. Thursby here. He thinks it imperative that he check the toad situation down there."

"I can tell him right now—there aren't any. And Doc Gosney weighs a lot, I'd guess."

"What in space...!" cried Goz, rising up from his seat with a murderous look.

"Now, now, no friction, please!" said the colonel. "Gosney is going, and so is Dr. Thursby. You can hardly be considered an expert on toads, Chuck. So just follow orders and leave the thinking to us. You'll have to reschedule any supplies for the next flight. The only question in my mind is the work here. We have two important projects that need your guiding hand, Thursby. Are you sure that your assistants...?"

"Perfectly sure," replied the professor. "Luki knows the procedure backwards and forwards, and Gil is a first-rate assistant. You know the caliber that the Estrada labs put out. And it's really very simple. All they have to do is release the toads in appropriate spots. The real work has already been done."

"There's just one thing, professor," Dr. Gosney put in. "Are you prepared for all eventualities? Suppose somebody gets bitten? I believe you mentioned an antidote?"

"Ah, yes. Yes, indeed," the professor assured him. "We've been working on it while we perfected the sterilization process. In fact, Gil, here, tested it for us. You survived a shot without too much trouble, didn't you?"

He was being very matter-of-fact about something that hadn't happened to him, but I played along.

"Inadvertently," I said. "One of the things bit me."

"And you're still alive!" cried the colonel. "You're to be congratulated, young man."

"Don't congratulate me. Dr. Thursby deserves the credit."

"Ah, yes indeed. Good job, Thursby! You seem to have solved one angle of the problem. Just be sure they have the stuff with them, and I guess the young people should be able to handle the job at hand. We'll have a truck at your disposal whenever you're ready to go." Colonel Northcutt nodded at Luki and me. "And that leaves the question of you two scientists. Remember, we can't spare you too long beyond the Barrier. Try to make your investigations as quickly as possible. When will you be prepared to go?"

"As soon as possible!" cried Goz, and the professor nodded agreement.

We all looked at the pilot.

"Tomorrow, remember?" he said. "You've spent too much of this night jawing here. We need all the hours of darkness to make a safe crossing. Tomorrow night at the earliest, and be at the port on time—six at the latest.

And don't bring anything you can't carry."

"Well, that's it, then." The colonel rose to leave and Chuck Witherspoon followed suit. "Everyone knows what to do. Get on with it!"

The two military men departed, but the rest of us were slower in getting to our feet. Perhaps we felt a kinship because we had all just come to Thursday, and for Luki and me, at least, it was all new.

"What do you really expect to find, Goz?" asked Luki. "I can see the professor has to go and check the toad situation. But you? I know it's been your dream to get down there, but what have they already found? Have you seen the reports?"

"Had a quick look." Goz sat down again. It seemed that he wanted to unburden himself to friends. "You know, it was my idea in the first place. But no, they couldn't do anything. Not till they got me safely off-planet! Then this lousy flitterman says there's a way. I could have told him so in the first place."

"But what about the people?" I urged him. "You said they found people."

I heard Luki suck in her breath. "People! Like us?"

"Quite astonishing," said Thursby, who seemed to know something about it. "On just those few islands."

"But where did they come from?" asked Luki.

"Perhaps somebody else has been colonizing," I suggested. "Two sides of the Heat Barrier and neither knows about the other."

"Oh, it's nothing like that," explained Thursby. "I doubt anybody else would want to. Not with the reputation we've acquired. No, I understand this is something much, much older."

"They're human all right," Goz put in excitedly. "Good old Terran stock. But they've been there so long—must be hundreds, perhaps thousands of years. They've forgotten their origins, so the report says. They've gone back to simple beginnings. Something like the primitive peoples that once lived on Earth."

"They can't have had much to work with," said Thursby. "And just those few islands. No signs of civilization we could spot from orbit. Really amazing. I'm almost as anxious as Goz to see them."

"But where did they come from?" Luki repeated.

"Some early spaceship that crashed." Goz had all the answers. "Or perhaps a marooning. But then, why pick that hemisphere? If it was a bad crash, there might have been no choosing. And victims of a marooning would hardly survive for centuries, unless there were women. And I never heard of that. No, it has to be a crash, and so long ago that they've forgotten everything. They even have a different language."

"It must have been one of the first!" cried Luki, her face glowing with excitement. "One of those early starships that never came back." And she began to recite in a high, clear voice, a childhood rhyme that everyone knew:

Leonis was the first to go, But where she berthed we do not know.

Next Starshine let her rockets burn. No more to Earth will she return.

Gosney smiled at her. I could see he approved of her enthusiasm.

"Quite right. We may have found the landing place of one of those old ships. When the stellar drive was first invented, things were pretty much of a gamble. Ships went out with little knowledge of what they might find. It was expected that many would never be heard from again, and many weren't. We're going to get up a list, though I doubt it will do us much good. Of course, I'll make a study of the racial types, but first of all, we've got to crack the language."

Luki was all agog. "Anthropologists. That's what we need. Do we have any on the planet, Dr. Thursby?"

The professor smiled at her. "I know all about your secret passion, Luki. She once thought she'd make a good anthropologist," he explained.

He made this statement to all of us, as though it were a joke. But I didn't think it was funny. If Luki wanted to be an anthropologist, why did she have to spend her life as Thursby's assistant?

Goz undertook to answer her question. "We've sent the best we have down there, I'm told. There's a woman called Jania Winters. I don't know her. She came during my absence. They've sent for more, of course. As soon as this gets out, there'll likely be a rush of your favorite scientists to Thursday, Luki—regardless of the toad menace. So let's make the most of the time when we have things to ourselves."

Dr. Thursby frowned. "Don't go putting ideas into her head, Goz. She and Gil have work to do. At the earliest moment they're going out to that Mustard wom-an's farm and arrange the release of a quantity of our specimens."

"I am?" I muttered, but nobody heard me because Luki was insisting loudly.

"But I'm really very good at languages, Dr. Thursby. And if that's the main problem, perhaps I could be of help—*after* the toads have been taken care of, of course."

The professor paused and looked at her eager face, and perhaps he remembered his own first enthusiasm for whatever it was. X-Tee life, I presume. And for Luki it was people. Every scientist has some subject that holds him beyond all others. He smiled and I could see he relented just a little bit.

"Well, after the toads. But that won't be tomorrow, Luki. And the sooner you get on with the job tomorrow, the sooner you can be released to something else."

"Oh, we will! We will! Won't we, Gil?"

"Oh, absolutely," I assured her, though privately I rather dreaded the trip to that woman's farm or ranch or whatever it was.

"And I'll be back to help you in a very few days. You heard the colonel. Goz and I cannot be spared for long. So let's all get a good night's rest. Lots of work in the morning."

We followed the professor out and presently found our assigned quarters. But as I settled into bed, I kept remembering Luki's rapt expression when Goz was describing the Thursday Primitives, as I'd begun to think of them. She and I were about to work on what I considered a very ticklish project. Were her thoughts going to be down on the other side of the Heat Barrier of that time?

## THE ONLY GOOD TOAD

Luki's mind was still running in the same channels the next morning. While she did not venture to let Dr. Thursby know what she was thinking, she could not help sharing her excitement with me as we fed and watered the toads in the laboratory, selecting those to be used on the pilot program.

"Just think of it, Gil! All those years—centuries —those people have been living down there and nobody knew anything about it!"

"Well, don't get any ideas about visiting them," I warned her. "You heard the professor. Our job is to lick the toad problem, and right now that means getting out to Mrs. Mustard's place to release this contingent."

"But that shouldn't take forever." She pushed the food container into the last cage, slamming shut the lid. "And by the time we've finished this phase, we should have earned a vacation. If Dr. Thursby can go trotting down to the

other hemisphere now, I should think we might be allowed to go later."

"One thing at a time," I told her.

In fact, I was not at all optimistic about our assigned project. Not that Luki and I couldn't handle the work. With my scientific training and her laboratory know-how, I was sure we could manage well enough. No, it was the people problem, not the toads, that had me worried. I was quick to sense when others saw me as an inexperienced kid rather than a trained scientist. And that attitude stuck out all over Mrs. Mustard—the friendliest of the colonists, at that. Of late, I fancied I'd been catching onto the proper ways of handling the toads. And with Luki to manage the people, we might do all right on our own. Yet here she was, thinking of nothing but what was going on in those islands on the other side of the Heat Barrier! It was as though she'd caught Dr. Gosney's "hunt the mystery" fever.

On our way out to the flitterport that night, where we saw Goz and the professor take off for the other hemisphere, I was mentally chastising Luki. Couldn't Dr. Thursby see that she didn't have her mind on the job? What did he mean by going off and leaving me with a flighty female and the most important work still to be done?

Then as he climbed into the cabin, he paused to shake my hand and looked me earnestly in the eyes.

"You heard all the things I said about you yesterday, Gil? I meant every one of them. I know I can trust you—and Luki—to do a fine job here. I know I can count on you."

As the flitter took off, I told myself that he could. I gave up worrying about Luki and whether she was leaving the burden of work to me. After all, I need only keep a close watch and needle her whenever she drifted off the work in hand. I knew I could do it, and no silly, ignorant colonial was going to put me off. Luki and I would do the job in spite of anything Mrs. Mustard might think or want.

So early the next morning, when we climbed up beside Captain Huddle in the cab of the truck, with the toads and equipment stowed carefully in back, I was annoyed to find that Luki was still in the same orbit. She could talk of nothing but what Goz and the professor were doing down in those islands.

"Dr. Thursby is working just as hard at his job of checking for toads down there as we'll be doing in the field up here," I told her. "And when we get this done, I can think of better things to do for a rest than to zoom off to the other end of this planet!"

Usually I thought, this situation is reversed, with Luki defending the professor. I could see by the line of her mouth that she knew this, too, and was ready to snap my head off in consequence. Fortunately, Captain Huddle broke in first.

"You're quite right, Dr. Abbott. There's nothing down there except a few islands—and some dirty savages, I hear now."

"But that's what's so fascinating!" cried Luki. "All these years they've been living down there. Surviving. How have they managed? Men can adapt to all kinds of strange conditions, and surely this planet must present some of the strangest. I guess I'm just a frustrated anthropologist," she sighed.

I remembered the professor's earlier remarks, and although I knew I should not encourage her, I could not help asking, "Have you ever studied the subject? You seem to know a lot about it."

"Oh, yes, that's how I started out. It was to be my major. But you know how it is. Everybody went into anthropology that year. It was the most popular subject. So I decided I'd have a better chance if I picked a field nobody else was much interested in. Then my money ran out anyhow. I had to take a job and I was lucky enough to get in as lab assistant on Estrada. I started working for Dr. Thursby and he's such a dear, I couldn't think of leaving him now."

"Not until now," I corrected, and grinned meaningly at her.

"Well anyhow, if he goes down there and I want to go, too, you can't call that leaving him!"

Huddle dared to laugh at that.

"That's female logic for you! Well, Dr. Abbott, you take my advice. When you've earned a rest period, you take it. Don't go spending it on some crazy trip beyond the Heat Barrier. There's some real nice bathing beaches and vacation spots up here."

Of course, that kind of advice from him made me want to follow Luki to the antipodes. But I felt I was getting away from my purpose. I could sense Luki boiling away beside me, and knew she was furious at his reference to female logic. So for once I kept my mouth shut and watched the country roll by.

Or rather bounce by. For the farther we got from the settlement, the rougher the road became. We ploughed on through mud and heat, with dense jungle walling either side of the tortuous way. Then, late in the morning, the road opened out into a clearing and we saw the starkly plain shacks that

comprised the Mustard station.

Most of the houses were of frame with a rough leaf thatch, and they were set up on stilts, with steep stairs leading to covered verandas. I vaguely wondered if this was a defense against floods or toads, as I followed Captain Huddle and Luki up the steps. There we shook hands with Emma Mustard, who was waiting for us on the porch.

"Well, I see you got here. Chow's ready soon as you stow your gear. And I hope you youngsters know what you're doing."

We assured her that we were prepared for all contingencies and would get the work done as fast as possible. Luki was shown to a small room at the back of the house, but the captain and I found we were expected to bed down on blankets in the barn. This was a stone building a short distance from the main house. It was set firmly upon the ground, and I could see that the cattle and such visitors as might be assigned quarters here would have to take their chances with toads and floods.

When shortly we returned to the house to join the group at the table, I was introduced to a large, loud-voiced man who was already talking to Luki.

"Mr. Bawcum—Amish—let me introduce the other member of the toad team!" Mrs. Mustard had difficulty making herself heard.

I remembered the man from our earlier meeting at headquarters and hoped I was not going to have to deal with both him and Mrs. Mustard, in the event of any misunderstanding.

"Ah, hum! Dr. Abbott, yes." Bawcum broke off his monologue to look me up and down. "Pretty young to be a doctor, ain't you? Must do these things faster on Terra. Out here, a man's got to make a name for himself before he gets tagged with any title. Well, I was telling your little lady here—mighty pretty one she is, too —I was telling her I came over from my ranch. That's fifty miles to the north of here. I came over to see how you folks make out with Emma Mustard. If you can clear the toads outta her station, you can move up to mine next."

Mighty obliging of you, I thought to myself. Mighty sporting! But again I held my tongue. I remembered our briefing about the stubborn streak in the Thursday Planet settlers. I saw Luki smiling at Bawcum while at the same time she managed a fleeting frown in my direction. Anybody who can do both those things simultaneously ought to be in the diplomatic service! I decided Luki and I would do all right, and contented myself with squeezing into my place at table and reaching for the huge flagon of iced drink. Right then I needed the refreshment.

Immediately after the meal we set out to view the ranch. Mrs. Mustard and Luki rode a pair of white donkeys, tough little animals, bred specially for the colonial planets. The rest of us walked. Luki insisted on taking one carton of six toads, which was firmly lashed behind her saddle.

"Just test those ropes, Amish," said Mrs. Mustard. "You wouldn't catch me with a basket of toads that close to my seat!"

"Me neither," said Bawcum, giving a halfhearted tug to the fastenings. "Suppose they was to get out!"

He smirked at Luki, and I guessed that only the fact that she was seated unconcernedly on the donkey kept him from retreating to the end of the line of march. Luki smiled sweetly at him.

"After all, the point is to let them out, isn't it? We just have to find the right place. I believe a waterway is their usual breeding area. Some sort of brook?"

She looked expectantly at Mrs. Mustard, who immediately urged her donkey down a forest path.

"I know just the right place for you," said our hostess. "It's over on the other side of the back acres. But it shouldn't take us long to get there."

I could see that Mrs. Mustard was going to have those toads released as far from her house as possible. Which was all right, I decided, as I walked along after the donkeys, sandwiched between Captain Huddle and Amish Bawcum.

We passed a dozen fields planted with as many different crops, while Bawcum lectured me on the best things to grow on Thursday and how raising cattle was pretty much out of the question because sooner or later they all fell victim to toad bite.

"Once we get this land cleared of the varmints, it should make good cattle country," he said. "But until that time, none of us has more than a few head. Herd 'em close to the barn and watch 'em. Keep leg guards on the beasts. Oh, hello there, Tom! Hello, Hendy!"

At each field we passed, Bawcum broke off his lecture to call to the laborers, while Emma Mustard waved from her donkey. In most cases the field hands took the opportunity to lay down their tools and follow along. Soon our little band had doubled in number.

At last we rounded the back of a field, took a little path into the forest, and halted at the side of a swift stream. Emma Mustard shifted in her saddle.

"How's this spot suit you?" she asked Luki. "Lots of water here. I wager the place is full of toads."

Luki agreed that it seemed like a good place to start the project. I helped her to dismount and together we unstrapped the box and carried it to the brook. There was a general retreat of men and mounts away from our vicinity. Luki placed the box on the ground with the entrance facing the stream and then raised the door.

"Come on, little ones, come on out. Here's your new home. Come see how you like it."

There was a scraping, slithering sound and the first toad made its appearance. Luki and I stood back to count the rest as they came out. As each toad emerged, it hissed angrily and puffed itself up, extending its eye stalks and swiveling them around to locate its enemies. The beasts presented quite a terrifying appearance, as we could judge from the gasps and shuffling among our audience, which withdrew even farther from the center of operations. But the lure of the stream proved too much for the toads, and each one relinquished ideas of attack for the call of the water.

When five toads had emerged and made their way into the brook, Luki picked up the back end of the box and shook it. The last toad fell out. It landed facing us, puffed up and angry, and gave one jump in our direction.

Luki brought up her toad stick, a long-handled device with firm padding on the end, that could be used either to pin a toad to the ground or to push it out of the way. She gave this specimen a deft prod to turn it facing the water.

"Come now," she ordered. "Get going after your pals. You'll be left way behind."

Whether it was the stick or her soothing voice, the toad deflated to normal size and made its way to the stream, where it promptly submerged. There was a sigh of relief from the watchers behind us.

"Did you hear her?"

"She talked to them."

"Well, that's that—thank the stars nobody got bitten!"

The gabble of voices died down as Luki and I walked back toward the group, and I savored the looks of amazement and respect on many faces.

"Are you sure there are wild toads around here?" Luki asked. "I haven't

seen any and it's important for these males to mate with the native females."

"Oh, yes," Mrs. Mustard assured her. "How about it, Hendy?" she called to one of the men who had followed us. "Seen many toads around here lately?"

"Oh, sure thing, ma'am. Plenty toads out here. They come out of the woods and go into the fields at night. Better not work in the fields after dark."

"Well, maybe I should release the next batch around the house," Luki suggested.

But Emma Mustard quickly vetoed that. "No water there for them. They wouldn't like that. I've got just the place for you. Other side of the double field. We can go there tomorrow."

So our little party made its way back to the ranch house, picking up more field workers on the way. It was plain that they did not want to be caught on the forest trails after dark.

All the way home, the talk was of nothing but the amazing way Luki had handled the toads. I could hear the field hands whispering about it along the way. And Mrs. Mustard was still exclaiming over it to Luki as she helped her down from her mount at the barn door.

Suddenly there was a commotion among the little knot of workers, and one of them broke away to approach Mrs. Mustard. In the early dusk I recognized the man they called Hendy.

"You ask about toads, ma'am?" he said. "I catch toad for you. They out early tonight. I kill 'em dead. One less toad to frighten you, ma'am." And he threw the dead toad down at our feet.

"Well, thank you, Hendy!" said Emma Mustard. "There you are, my dear. No doubt about the Toxic Toads on this ranch."

She would have said more, but she was interrupted by a scream from Luki.

"Oh, but look at it! Look what he's done! It's one of my toads! He's killed one of my toads!"

She picked the creature up, not by a back leg, as the worker had done, but cradled in her cupped hands. And as she mourned, she held it out to the group of startled colonists.

"He killed it! He killed it! He's ruining our program! All the work and labor of years and years!"

As I hastened to calm Luki, I was aware of the consternation among the others.

"You must be mistaken!" exclaimed the Mustard woman. "It can't be your toad. How could it get back here so quickly?"

"You mean to say, you can tell those things apart!" This was from the frankly skeptical Bawcum.

But Luki held out the limp body, pointing to the small black number tattooed on one rear leg where it joined the body.

"See there! I put that mark on myself!" Her first distress was giving place to healthy anger, and she glowered accusingly.

"Hendy! Where'd you pick this one up?" demanded Mrs. Mustard.

Pushed forward by his companions, the confused man looked hesitantly from his boss to the angry Luki.

"Back there on the trail. It hopped out and I took a swipe at it. You asked if I'd seen any. I'm collecting for the pool. Top man gets extra rations and I been leading all week."

"There will have to be a moratorium on killing toads!" Luki declared firmly.

The men gaped at her.

"Not kill toads!" cried Hendy. "Where's the sense to that? Everyone knows the only good toad's a dead one."

"Not in this case," said Luki. "This toad was specially fixed to produce infertile eggs in all the female toads it mated with. That's how we're going to get rid of all the toads for you. It just takes a little time. But don't you see, if you kill off all the special toads we brought, the program will never work."

The man shook his head wonderingly. "It'll never work anyhow," he said. "But I'm sorry if it was your toad. All toads look alike to me."

"I suppose I'll have to give orders against killing toads," said Emma Mustard. "But I doubt whether that will work. It's second nature for the men to kill every toad they see. It's been drilled into 'em. Every toad killed prevents a possible death for man or beast."

"If I may make a suggestion," Captain Huddle put in, "couldn't you mark your toads more spectacularly? It seems you can pick yours out at a glance, but none of us would notice your marks. If you could somehow put a big, bright mark on 'em that nobody could miss..."

"Hey, that's an idea!" cried Bawcum, who could never stay out of any discussion. "Put a big, black X across their red backs and then tell the men to leave all such alone. I wager it'd work."

"I think you'd do better that way, dearie," said Mrs. Mustard. "I couldn't guarantee what you called it—a moratorium—on toads. But if you could mark 'em the way Bawcum suggests..."

"I guess I'd better talk to Dr. Thursby," Luki began in a shaken voice, and then stopped and stared at me as she remembered how far away our boss was at that moment.

"I don't suppose that's possible," I said, trying at the same time to convey confidence for Luki's benefit. "How are your communications on Thursday?"

"Oh, we have radio contact with headquarters at all times," Mrs. Mustard assured her. "Come into the house while I set things up."

Luki and I exchanged glances. We realized that the colonists did not know that the professor was already beyond the Heat Barrier. Still, good radio might even extend that far.

"I think I'll try to make contact," said Luki. "You never can tell." And she followed Mrs. Mustard up the stairs and into the house.

I climbed the stairs, too, with Captain Huddle and Mr. Bawcum, and we three sat down on the porch.

"Sort of overlooked the human angle, didn't you?" the latter remarked.

It was almost as though he enjoyed each snag that came up in the program. Or did he object to having it run by two such young people? Inwardly, I wondered if perhaps the professor should be here to lend his authority to the work. But I wasn't going to display my misgivings to this farmer.

"Well, frankly, we did expect close cooperation from the human population. Wouldn't you, if you had come to help people out of their difficulties? But don't worry. Science will find a way."

For once, Bawcum seemed to have no ready reply. He stared stupidly at me, and I turned to join the captain, who was pouring out iced drinks for us.

In a short time, Luki came out with Mrs. Mustard and I could tell by the girl's face that she had been unsuccessful.

"We can't reach Dr. Thursby," she said. "Not directly. We would have to go through headquarters and they only talk with them once a day. Colonel

Northcutt said to use our own judgment."

"Well then, let's do it! I think Mr. Bawcum made a fine suggestion." I smiled, giving credit where due. "But it would be better to use white instead of black. It would show up in the bushes. Do you have some white paint, Mrs. Mustard? Just ordinary house paint. But not whitewash. That might come off in the water."

"I'm sure we do, dearie." Mrs. Mustard was obviously relieved to have the crisis resolved. "We'll get it for you first thing in the morning."

"Oh, couldn't we have it tonight?" Luki cried. "After supper? Then Gil and I can have them all marked and ready for release in the morning."

Trust Luki to see that we miss out on our sleep, I thought. But I found myself agreeing with her that the sooner we could get on with our work, the better.

Mrs. Mustard continued to be helpful. "My only condition is that you do the work in the barn. I'll have the cattle moved out. But I just can't allow any toads in the house. Suppose one escaped!"

"Suppose one escapes in the barn!" Captain Huddle muttered to me.

Remembering that he and I were to sleep there, I assured him that Luki never, never let her toads escape. I failed to mention what had happened the one time I let a cage drop.

After the evening meal, we repaired to the barn where we found several cans of white paint and brushes set out in readiness. We would have had a good-sized audience for our task if we'd allowed it. But Luki insisted that she could not work under such conditions. All the farm hands were sent away, and only the captain stayed, with Mrs. Mustard and Mr. Bawcum, remaining in a little group at the safe end of the barn.

The donkeys and the three milk cows had been led out and tethered in the yard. I noted that all of them wore metal guards around their legs as protection against toad bite.

Luki and I soon had our system organized. We put down an empty cage, with the door open, a short distance from a box full of toads. Then the door of the box was opened and its occupants urged out, one at a time. As each toad emerged, Luki pinned it to the ground with her toad stick, while I quickly daubed a big cross of white paint on its back. Then, with an expert shove, Luki propelled the creature to the door of the empty cage. Hissing with rage, the Toxic Toad leaped forward, to land in the confinement prepared for him.

With a little practice, it all went like clockwork. Soon each empty cage had a toad in it, and we paused to consider how we might combine the specimens. Then Captain Huddle came forward and offered his help. I could see that it cost him an effort. Remembering his reaction at the banquet, I could only admire his courage.

Now he pointed out that it was wasted effort and also hazardous to transfer the toads from cage to cage. Why not let him stand behind a cage holding marked specimens, and at the exact moment when a newly marked animal was propelled toward the door, he would pull it open. The door would only be up long enough for the toad to go in, and he would immediately let the trap fall, thus preventing the other toads from getting out.

This seemed like an excellent idea. A rope was at-tached to the cage door so that Huddle could raise and lower it from behind, and our work proceeded apace. Cage after cage was filled with its quota of marked toads, and the number of unmarked specimens became fewer and fewer. With luck, I could see that we might be done before midnight.

But as often happens in these cases, repetition led to carelessness. The hour grew later; the toads to be marked, fewer. Bawcum and Mrs. Mustard plucked up courage and came closer, hiding their yawns behind their hands.

I was scraping the bottom of the paint pot, but with only a couple of specimens to go, I disregarded Mrs. Mustard's urging to open a new can.

"I'll make do with what's here." I twirled the brush around inside the can in what I thought was a highly professional manner.

But as Luki pushed out the next toad and I swished out the brush to daub on the marking, the lightweight can suddenly overturned. It spun off in a direct line for Huddle's cage, where it struck with a sharp impact.

This unexpected blow jarred the cage out of delicate balance. Before the captain could move, the box overturned, landing with its door open so that several toads scuttled out. There was a general rush away from us by all observers. For me it was too reminiscent of that earlier scene on Estrada. Why was it that every time I thought I had a physical operation well in hand, something like this happened? Whereas, when it came to pure brainwork...

I cut short my regrets as Luki called me to come and hold her toad down while she pursued the escapees. At the same time, Mrs. Mustard shouted:

"The stalls! Don't let them get into the stalls! I'll never dare put an animal in there again!"

I grabbed Luki's toad stick to gingerly prod the unmarked specimen back into its original box, at the same time being careful to let none of the others out. Luki caught up another stick and was chasing toads around the barn, carrying a box with her into which she forced the excited creatures.

"Oh, stop worrying!" she snapped at Emma Mustard, who stood in a corner, wringing her hands. "If they get into a stall, we'll get 'em out!"

"But they may lay eggs in there. There's always that danger and weeks later..."

"Don't be silly! These are all males."

"Well, they could mate with a female," said Mrs. Mustard unreasonably.

"That's what we want, isn't it? In the unlikely event that there's a female lurking in your stall!"

Luki plopped another toad into her cage and surveyed the barn floor closely.

"Is that the last? Have we got them all?"

There was a general sigh of relief, until Captain Huddle disillusioned us.

"I'm afraid one did go in there."

He was standing at the door of a stall, armed with a broom. We joined him to peer into the darkness.

"Bring a light, Bawcum. Try to be of some use," ordered Mrs. Mustard.

Mr. Bawcum, who had been hovering on the outskirts of the action, now approached with a powerful hand beam. As he directed it into the stall, a toad was seen sitting in defensive posture in the middle of the floor.

Luki moved to go in, but the captain thrust out his arm to bar her way.

"Let me chase it out to you. You can handle it better out here."

Without waiting for her reply, he stepped into the narrow stall. It was evident that a broom was not the ideal weapon in that confined space. The toad moved quickly when Huddle approached, and he had trouble getting behind it to flush it out the door.

"You don't need to do that," began Luki. "I can manage better..."

She could not go in, as that would only crowd and confuse matters.

Suddenly, the toad leaped. It seemed to be jumping straight for the door,

but it must have changed direction in midair. As we all jerked back from the entrance, there was a yell from Huddle. The toad shot out, propelled by a kick. The captain followed, holding his leg.

"Great Galaxy! It bit me! Space knows how... it was that quick!"

Then he crumpled to the floor, where he thrashed around for a few minutes and lay still.

Luki had pursued the toad and now had it pinned to the ground. The rest of us stood frozen for an awful minute, staring at Captain Huddle. I knew too well what the man must suffer and hoped that by now he might be unconscious.

"My stars!" cried Mrs. Mustard. "How did that happen? He shouldn't have... he shouldn't...!"

"Call the hospital!" shouted Bawcum. "Notify headquarters! I'll get the truck!" And he ran from the barn.

There was no time to lose. "Where's the serum, Luki?" I cried. "You brought it, didn't you?"

"It's in my bag—in the house—in my room!"

As I rushed out of the barn, I saw her snap shut the last cage and turn to bend over Captain Huddle. When I returned with her bag and the serum, after a headlong dash up the outer stairs and an equally headlong rush down, Luki was trying to calm Mrs. Mustard, reassuring both her and the gathering farm workers.

"There's no need to look so gloomy. He isn't dead. We have an antidote. Here's Gil now. He hasn't lost a minute."

She took the bag from me, quickly pulling out the package of antivenin. I winced as I saw the shot go in, for I remembered how it felt. But Captain Huddle gave no sign of any reaction.

"Hadn't we better get him to a doctor?" asked Mrs. Mustard.

"Yes, of course. That's the next thing. I believe Mr. Bawcum went for a truck. Oh... Oh, Gil! Dr. Thursby won't be there! Both he and Dr. Gosney are still beyond the Barrier!"

Her hand went to her mouth, her eyes large and troubled, as she realized how much rested now on our shoulders. But Mrs. Mustard was comforting.

"Don't you worry," she said. "Get him into the truck and back to the hospital.

I'll raise headquarters on the radio right away. They'll know what to do and be ready for you when you get there."

*Mr*. Bawcum and two *of* the hands carried the captain from the barn and laid him on a pile of blankets in the truck. But before she followed, Luki glanced around.

"We can't go and leave all this, Gil. Anything could happen to the specimens. You'll have to stay and look after them. Promise me you won't let anything harm them now."

"Of course," I assured her. "But I should go with you. You'll need me."

"You're needed more on this job," she said. "Don't worry about the captain. I'll be with him—and Mr. Bawcum. Their best man will drive the truck. And after all, we've done all we can for him right here."

I didn't like the sound of that "done all we can for him." I watched as Luki climbed into the back of the truck with Mr. Bawcum and the unconscious Huddle. When they had rattled away down the road, I turned back into the barn and began stacking the specimen cages against one wall. Mrs. Mustard was in the house, making contact with headquarters. I felt alone and somehow a failure. If I hadn't knocked over that paint can! What kind of report would go in about my performance?

There was a slight sound from the barn entrance and I looked up and saw the man, Hendy, standing there. Somehow I expected him to point an accusing finger, but he only stared mournfully. Then he spoke.

"Like I said. Like I told you before. The only good toad is a dead toad!"

## SUTTER COUIV"" 750 FORBES VUBA CITY,

## MICROBE MIRACLE

That night was the worst and longest since I had left Terra, with the possible exception of the one following my visit to Dr. Thursby's laboratory. And of course, that first time I was unconscious and unaware of impending disaster. Now I could smell it all around me.

I spent the long hours on the barn floor, huddling among the blankets placed there originally for the captain and myself. Mrs. Mustard tried to persuade me to move into the house, saying I could use the room assigned to Luki. But a nagging sense of duty made me refuse. I had promised Luki that the specimens would be safe, and guarding them was my job.

Emma Mustard sniffed at my outspoken determination. "You wouldn't catch me sleeping in this place! Right next to those things, too!" she added, glaring at the cages. "Not after what's happened."

But it wasn't the fear of toads, specimens or wild, that kept me awake. It was a half-caught muttering among the field hands. That, and the uncertainty of Huddle's fate. I had heard Dr. Thursby assure the colonel that an effective antidote had been developed. But I also remembered the arguments about efficacy and testing and how what worked for one victim might not work for another. And I sensed a difference in Huddle's reactions. Surely, I had not blacked out that fast. I could even recall the prick of the needle. The more I thought about it, the more uneasy I became. For if the captain should die, what would be the reaction of the colonists?

And I was tormented by the thought that once again I had muffed an assignment. Well, from now on nothing else would go wrong! I moved the toad cages to the corner farthest from the door and arranged my blankets in front of them. Then I lay down to wait out the night.

But my thoughts would not let me rest. I went over every happening of the past day. Was it once again my fault that the toads had escaped? I wasn't afraid of them this time. I had to admit it—I was showing off! But then Huddle himself had volunteered. He'd suggested the new method of opening the door. And he had insisted on going into the stall instead of Luki. If he'd left it all up to us, with our experience, this might never have happened. I had to hand it to Huddle—he had guts, even if he had messed things up. I remembered his earlier abhorrence of the toads and I felt awful just thinking about what had happened to him.

Maybe I wasn't meant to function in a lab. Or in the field. Here I was, working in the field; in a way, the sort of thing my father had always talked about. What would he think if he saw the mess I had made?

And then I heard his quiet voice saying, as he often had, "Everyone can make a mistake, Gil. What's important is how you pick up the pieces and go on."

Oh, yes. Well, he and Mom had made a mistake, and there weren't any pieces left to pick up!

I was getting onto lines of thought I'd promised myself would be closed forever. And then, as I was trying to force my mind into another channel, I heard a stick crack outside the barn.

I sat up and grabbed the toad stick with which I'd armed myself. It seemed a poor kind of weapon, especially if there was a mob. I kept perfectly still,

listening, when it occurred to me that I had the super weapon right there at my back. The toads! If I released the toads, no army of field workers would dare enter the barn. But of course, I didn't want to release all the toads. That would defeat my promise to Luki. But one toad. One toad held by a back leg so it could not get at me, and perhaps thrown? As the witches had done in my dream.

I sat for quite a while savoring this idea, until I realized there were no more noises outside the barn. It was all my imagination. And as I relaxed on the blankets, I knew that I was no longer afraid of the toads. I wasn't afraid of anything—colonists, field workers, or toads! I was going to do this job and none of them would stop me. If I'd made a mistake, it was a small one. It was not the sole cause of Huddle being bitten. There were also the hands who insisted on killing toads. And Mrs. Mustard with her many objections. And Bawcum with his marking idea. And Huddle himself and his misplaced chivalry. Going into that stall, when Luki could have handled the job easily!

Finally, there was Luki. Why had she left the serum upstairs in her room? But I didn't want to think about that. And I found that I was getting sleepy. Anyone who tried to get at the toads would have to fall over me first. I rolled up in the blankets, and in the early hours of the morning, I fell asleep.

At sunup, Mrs. Mustard called me from beyond the barn door.

"Oh, Dr. Abbott! Dr. Abbott! Are you all right? Oh, thank the stars! I feared you might be dead—bitten in your sleep!" She laughed nervously.

"Not dead, but dead tired," I muttered, as I glanced hastily at my cages and then joined her outside the barn. For her benefit, I added, "Mrs. Mustard, if I get bitten, everyone for miles around will know it, because I always yell bloody murder when a toad bites me. Now what can I do for you?"

"Oh, it's what we can do for you, Dr. Abbott, I'm sure. I thought you might like some breakfast, and your Miss Sorrell has been on the radio speaker already. She wants to talk with you when you're awake."

"Coming right away." I paused just outside the barn door. "Will it be all right to shut this? Is there any kind of a lock?"

"Don't you worry. Nobody will go in there. I've given orders. Can't afford to lose any of my men. Not that I believe they'd have the guts to go in after what's happened."

So much for the cracking twig and my worries, I thought! But I closed the door firmly and followed her up the stairs to the veranda. Then while Mrs. Mustard busied herself with breakfast, I went into her corn-room to call

headquarters.

Luki's voice held a note of strain.

"Oh, Gil, something's very wrong! He's not responding the way you did."

"Is he alive?" I demanded.

"Yes, but he's still in a coma. His temperature's way down and his pulse is erratic. Nobody here really knows anything about treatment. They've sent for Dr. Thursby and Goz. They're on their way now. But I'm frightened, Gil. You'd better come back, too. I don't know what's going to happen."

"I'll be right there," I tried to sound confident. "Soon as I can get transport."

"But not without the specimens, Gil! Be sure you bring all the specimens. Dr. Thursby will want..."

"Just take it easy," I told her. "I'll see that all his precious toads get back to him. And now *you'd* better get back to Captain Huddle."

"Oh, yes! Oh, you're wonderful, Gil! I do only hope..."

But she broke contact before I heard what hopes she harbored.

While I ate, I told Mrs. Mustard that I wanted a truck with a good driver to move all the cages and their contents back to the main settlement. I thought she seemed relieved to hear that the experiment had come to an end, at least as far as her station was concerned. And she was brisk about arranging for the truck and driver. By the time I was done eating, I was able to supervise the loading of the cages.

The driver was Hendy, and I was afraid he was going to repeat his caution about the "only good toad." But he merely shrugged and nodded, with a "better you than I" air, when I insisted on riding in the back of the truck along with the cages.

"Just in case any of them get bounced about," I explained. "Or fall open. That's a very rough road in spots."

I could see that Hendy thought it would be all to the good if the cages bounced out into some river, but he made no comment and did a good job of getting us back to the settlement. When we reached our lab in the early afternoon, Hendy even helped me unload the boxes and carry them inside. Then he rattled off at a speed plainly suggesting that he hoped he had seen the last of me.

Luki was in the lab, caring for the specimens that had been left there. She

only waited until we were alone to give me the latest news. Her strained face did not promise anything good to come.

"Oh, Gil!" she cried. "He's dead! The captain's dead! It happened just a few hours ago. And it's all my fault! What will I ever do? How can I tell the professor?"

She began to cry, tears spilling out with no attempt to wipe them away. Her two hands held tight to my jacket. I put my arms around her.

"Take it easy. These things happen. Nobody will say it was your fault." It was hard to find words now when I was really trying to comfort her.

"But it worked with you? Why didn't it work with him? It must be the delay. You had to go upstairs to get the serum. Oh, I should have been carrying it with me, but I never expected trouble then!"

"You didn't expect it because you're not used to having an idiot like me along. If it's anybody's fault, it's mine. I tipped over the paint can and it rolled..."

"Oh, Gil, anybody could have done that!"

"Anybody like me," I corrected, trying to make it easier for her. "Now don't worry. I've got all the specimens back, and the professor will know what to do. When's he due to arrive?"

Little by little Luki was regaining her confidence. She pushed out of my hold and got a handkerchief to wipe her eyes. The Doctors Thursby and Gosney were expected back by evening, she said, between small catches of breath. And the colonel had put a double guard around the lab, just to be on the safe side.

"I thought I noticed a few more soldiers out there," I said. "What's he afraid of now?"

"There's been a lot of talk about the captain's being bitten. And now that the antidote didn't save him, people are saying Dr. Thursby's promises don't work out. Mr. Bawcum has been sounding off ever since we got back, and when Captain Huddle died, he said some really nasty things."

Her hands were shaking a little now and there was such a catch in her voice I was afraid she might start crying again.

"Don't pay any attention to him. He's an ignorant farmer and none of this is your fault."

"But if it's not my fault, they'll start saying it's the professor's, and that's

worse!"

"I'm sure Dr. Thursby will know how to deal with a character like Bawcum. What's the colonel doing about all this?"

The colonel, it seemed, had scheduled another meet-ing like the one at which Mrs. Mustard had offered her ranch for the experiment. I could imagine what was going to happen, but I knew that neither Luki nor I would be of much help to our chief unless we got some rest. I persuaded her to lie down on a cot in a back room. As for me, I dragged a second cot into the lab itself, and after telling the sentry at the door to be sure to wake me if anything happened, I lay down and soon fell asleep.

I was awakened by a metallic click. Luki had just set a well-loaded tray on a table.

"I'm sorry to wake you, you were sleeping so nicely," she said. "But you'd better eat something before we go to headquarters. The doctors have arrived and they want us to be at this conference."

"Then we'd better hurry." I got up, prepared to leave at once, but she pushed me firmly toward the chair by the table. "How about you?" I asked.

"Oh, I ate while I was fixing yours. There's a well-stocked kitchen back there. Very convenient. A nice place to work, if there weren't all these problems. Go ahead, you've got time."

Seeing that tray, I was hungry and cleared it quickly. Then giving orders to the guard to be sure nobody got into the lab, we left.

We were surprised at the numbers of people in the streets. The crowd in front of the headquarters building was as great as on the night of the welcome dinner. But they weren't cheering Dr. Thursby this time. There were angry looks and mutterings. It seemed that all the colonists and farm workers for miles around had gathered in what might be a covert threat, as their disappointment grew. They separated easily enough to let us through, but I sensed feelings which made me hurry Luki on in.

Inside, the tension was even higher, adding to my initial uneasiness. I recognized Bawcum's voice at once. He had the floor and was delivering a diatribe that included a colorful description of our recent efforts in the outback.

"And because of all this nonsense and these fumbling, inefficient assistants with fancy titles, a fine, upstanding officer in the colonel's forces, a man you all knew and admired, is dead. I brought him into the hospital myself. But this antidote the professor promised turns out to be no antidote at all! And

so he's finished. One more example of mismanagement. And I for one am in favor of catching the first rocket out of here. There will never be any solution to this problem. That's a fact all of us better face up to now!"

As Mr. Bawcum paused to catch his breath, the colonel banged on the table.

"All right, Bawcum. You've had your say. And I can see there's many that will agree with you. But let's hear from the other side first."

Dr. Thursby had been standing quietly at one side. But he reached out to take Luki's hand, then mine, as we joined him. From the grip he gave, I felt at once that he still trusted us. Now he approached the table and looked around at what was mainly a hostile audience.

"It is regrettable," he said, "most regrettable that this has occurred. I had a most favorable impression of Captain Huddle from the few times that I met him. I can only say that he died in the line of duty."

He paused and looked at the colonel as if for help.

"Absolutely," said Colonel Northcutt. "In fact, the captain was defending the lady, I understand. And may I add that Huddle's initial report to me gave highest respect to the efficiency of the field team."

"On the other hand," broke in the professor, and his voice developed a slight edge, "it was reported to me that this special task was required because of insufficient cooperation from the local colonists. If you people had agreed to refrain from killing all toads for a short time, we could have released our specimens without trouble, and you would soon have seen the results. But since no cooperation could be guaranteed, we had to undertake the marking of the treated specimens. It was during this operation that the unfortunate accident occurred."

There was some shuffling among the colonists, and they could be heard muttering: "The antidote... said you had an antidote!"

"Ah, yes, the antidote," Dr. Thursby nodded. "I will be frank with you and admit that I don't know why it didn't work. I do not believe the short delay in administering it caused the failure. It was successful with Dr. Abbott here, but then, as others have remarked, he's a peculiar case. Obviously, it needs more testing than we were able to give it back on Estrada, and Dr. Gosney and I plan to begin this work at once."

"There you are!" declared the colonel. "We have been entirely frank with you. What we need now is a little patience and cooperation. Space wasn't won in a day."

But the muttering continued and none of the colonists showed a tendency to leave. At last Bawcum's voice rose above the rest.

"What about the toads? You planning to turn loose more of your precious specimens? 'Cause you can just skip my ranch if you are. I'm telling my hands to go on killing every toad they see as long as I'm running things. Which mayn't be too long."

This speech elicited applause and shouts of "Me, too!"

"That goes for me! You tell 'em, Amish!" I could see that any scientific program of toad extermination was being brought to a standstill.

Colonel Northcutt banged with his gavel till the hubbub partially subsided.

"That's where you're wrong, Amish Bawcum!" he shouted. "You never want to listen to the whole story. Dr. Gosney here has agreed that we can take a chance on the bacteriological method—the third possibility that Dr. Thursby explained to us. A virus, you know. This should work much faster. And after careful consideration, Dr. Gosney feels that there is only a slight chance of the selected virus attacking other life forms on the planet. So we will begin this new program as soon as possible."

"Just as soon as the serum can be prepared," Dr. Thursby told them. "And we will not ask any of you to assist us. In fact, Dr. Gosney has a plan that should inconvenience you as little as possible."

Mr. Bawcum was silenced for the moment by all these answers to his complaints, and at last the meeting broke up and Luki and I had a few minutes alone with our chief. Dr. Gosney and the colonel had gone out with the colonists, talking persuasively and trying to quiet their fears. The professor put his notes back in his pocket, wiped his glasses, and turned to us.

"I'm afraid you two got a rough introduction to work on a frontier world. I should not have left you, but the operation seemed fairly simple, and I'll admit my curiosity was aroused by Dr. Gosney's stories."

"And what was it like?" cried Luki. "What were they like?"

"That's hard to say." He smiled at her enthusiasm. "The men are fine physical specimens. Really surprising under the circumstances. We haven't met any of the women yet. They haven't brought them around. Shy, perhaps. And there's the language barrier, of course."

He paused long enough for Luki to interject, "Oh, but I'm *very* good at languages!"

"That's beside the point!" He cut her short. "All work down there has been suspended until we solve the toad problem. After all, that was and always will be our first concern. The camp has been closed down. So put your minds on the work at hand—both of you. You know what the problems are: a better antidote... the virus-control program. We've a big job ahead of us. Ah, here comes Goz to tell us how he's going to distribute infected toads to the best advantage. He's taken on that part of the work. We'll do the job of infecting them, and then he'll scatter them about the land."

Dr. Gosney, it developed, intended to release the toads by air. At least, he planned to hop around from settlement to settlement in his aircar, dropping off toads as he went. He and the colonel were soon busy with a map, working out the best itinerary. And before I quite knew what had happened, I was assigned to go with him.

We all went back to the lab, where Dr. Thursby and Luki were soon busy culturing a batch of antitoad virus.

"This little organism has been named *Spica helicü rubra*," the professor held up a vial. "Because it was collected on one of the barren worlds of Spica and looks like a red helix under the microscope. It seems to have an affinity for our Toxic Toads—an attraction which should prove very helpful to us."

After we had examined *rubra* in the field of the electronic scope, Goz and I tackled the job of improving a number of our standard toad cages for easy transportation. Taking the smaller ones, we attached long wires to the tops, so they could be lowered by a winch from the aircar. Then we adapted the cage doors so that a slight jolt would cause them to spring open.

"I really don't care so much for that," said Gosney, as he dropped an experimental model and saw the door fly out as planned. "Suppose we hit some rough air and the cages bounce around inside the car."

So we added a safety catch on each door, to be released just before the cages were lowered. When we'd completed four such cages, the young doctor sent me off to bed.

"They'll work all night to get infected specimens for us. But we have to be our most alert tomorrow. So see that you really get to sleep. We've a hard day ahead of us."

I had no trouble following his orders. It seemed a long time since the morning and I'd not had much sleep the night before. But I had barely closed my eyes before an orderly was shaking my shoulder, saying that the sun was up, breakfast was ready, and Dr. Gosney was waiting for me.

As soon as we'd eaten, we went to the flying field, where Luki and the professor met us, each carrying two of our new cages.

"Here we are!" announced Dr. Thursby. "And here are your specimens. All set to start a plague for the toads. We haven't stopped working since you left us, Luki and I."

I climbed into the aircar after Dr. Gosney, and the professor handed up the cages.

"Be sure you release the catch before lowering them," he warned. "There's one toad in each of the special cages now, and this last box holds all the rest we've inoculated so far. Should keep you busy for a day or two."

I helped stow the boxes as safely as possible and took my seat beside Gosney in the little cockpit. Luki was waving good-by.

"Just be sure you keep the catch tight on each box until you're ready!" she called.

The car shot up into the air under the expert handling of Dr. Gosney, and any other advice she might have had was lost. At least this time she appeared more concerned over our safety than over that of our live cargo.

Goz flew his car with the same enthusiasm he showed in conducting an argument. We zoomed up to higher altitudes and dropped as suddenly when he spotted a good release location. He shouted instructions at me over the hum of the engines.

"Might as well begin close to home. That way we can notice the results quicker. I sure hope your chief has a potent bug, long as we've got to do it this way. And we'll skip that field because there are some workers in it. No tangling with the human population this time!"

The car bounced up again suddenly, and I grabbed onto the struts and peered out at the startled faces turned up toward us from below.

Our improvised release mechanism worked perfectly, and soon we were scattering infected toads around the countryside. I was impressed with how simple the operation proved to be. The only serious problem was the refilling of release cages with toads from the main box. But with practice, I became quite adept at even that. By putting the doors of the two cages firmly together and then opening them, it was fairly easy to induce a few of the animals to pass from one box to the other. Gosney, however, insisted on shutting the door between the cockpit and the cargo area at such times.

"You'll excuse me if I concentrate on flying this thing," he said. "There's

nothing like a Toxic Toad to get one's attention off what one should be doing."

By the end of the day we had exhausted our supply of toads and had covered the environs of headquarters pretty thoroughly. We returned to the flying field, where we found Luki waiting with a fresh supply. And Goz had no thought of stopping operations for the night. After a quick meal in the canteen, we took off again, climbing through the darkness to the hinterlands, releasing our toads near the stations of unsuspecting farmers. It was not until the small hours that we caught a few minutes of sleep. At dawn we flew on, dropping our burdens in remote areas, anywhere a curl of smoke told us that colonists lived.

I was amazed at Gosney's knowledge of the country and I said as much.

"A doctor has to get around on a frontier world," he answered. "I was trained for the aircar before I ever came here, and I certainly haven't been stationary during five years of residence. You can't wait for the patients to come to you, or you're likely to have corpses instead of patients!"

He was full of stories about people who lived in all these places, and I began to suspect that he must know every settler on the planet. And he was unhappy about the failure of our first toad control, expressing himself frankly.

"Thursby's first plan would have worked, if they'd helped you instead of panicking. Much safer than this one, too, but I don't think we'll have trouble. Still, I've no patience with people who don't have guts. What do they mean, emigrating to a pioneer world if they aren't prepared to take chances? Some of these farmers ought to see those natives beyond the Barrier! Now *they've* got what it takes! Not many up here could survive the way those have, with nothing at all but their hands and their brains. It's a miracle! They're wonderful people!"

I encouraged Goz to talk about his discovery. But all I could learn was that there were not very many natives on the island where the outpost had been established, and they were all fine physical specimens.

After a week of flying about the land, we returned one evening to the main airfield to find an excited Luki waiting impatiently. I was barely down from the cab when she flung her arms around me. Even Goz received an enthusiastic kiss.

"You won't believe it!" she cried. "We're succeeding! There's an epidemic!"

"Among toads, I trust," said Gosney.

Luki made a face at him. "Of course. They're dying by the thousands. Farmers are bringing them in from all over. They crawl out on the banks of the streams to die, and the farm hands find them. Nobody's seen a live toad in days, and the colonel has set up a prize for the man who brings in the most dead ones. Every night we count them and have a bonfire."

Gosney looked thoughtful for a moment. "You think it's wise to destroy them all?"

"What else can we do? Leave them to rot? And the poison may still be dangerous. We offered the prize so we could make some kind of estimate."

That night we took out our last load of infected specimens. Dr. Thursby joined Luki at the field to see us off, urging us to be sure to cover all the out-of-the-way places.

"I think we've got the problem licked," he said, smiling in a way he had not done since we arrived on Thursday Planet. "But let's make it certain. Take your time and be sure you've covered the country."

We were gone longer this time, flying around the edges of the settled areas, dropping one toad at a time. I worried about the mountain fastness that stretched away to the south polar desert, but Goz assured me that toads did not inhabit such places.

"They're quite human in their preferences," he said. "They like the inhabited countryside, the streams and green valleys."

When we got back to headquarters this time, we found the colonists in the midst of a celebration. Conquering heroes in their eyes, we were mobbed at the flying field, to be carried away on the shoulders of several stout ranchers to a dinner already in progress at the main building.

For my part, I could have done with a good rest before celebrating, but Goz urged me to oblige our admirers.

"We've been short on food and sleep for a bit now," he said, "and there's nothing like a good feed to set things straight. We can sleep afterwards. Let's go see how the professor's taking it."

The professor was basking in his long overdue recognition. Victory over the toads was established, and he was the man who had made it possible. Once more we found places at the long tables and listened to excited speeches. But this time all of them were in favor of Dr. Thursby. Even Mr. Bawcum was there, loud in his appreciation of our program. One would have thought he had never been spokesman for the opposition.

"It's a miracle!" he declared. "An absolute miracle —and I say it myself!"

I sighed with satisfaction. At last we had time to think of something other than toads. I wondered if Luki would now demand immediate leave, to be spent at Dr. Gosney's new outpost. However, when we had a chance to talk, she said there was still uncompleted work on the project.

"The doctor's still working on the antidote. No great hurry about it now, as it seems unlikely that there will be any more toad victims. But he has to know for his own satisfaction why it didn't work for Captain Huddle. He's promised to let me go in a week or so, if I just finish up a few things here first. Why don't you go down with Goz, and I'll join you later?"

"I'm not like you, that's why," I told her. "You're a glutton for work, jumping from one job right into another. No thanks. Old Goz has run me ragged long enough. I'm taking a real vacation."

Luki showed more than a trace of impatience as I outlined my immediate plans. Mrs. Mustard had looked me up when she came to headquarters to report the remarkable disappearance of toads around her station. She was generous with her praise of Dr. Thursby and apologized for any inconvenience Luki and I had experienced at her place. She ended with an invitation to visit her seashore cottage. It sounded like a fitting reward for my recent labors, and I said yes before she could change her mind.

"Well, when you get back," said Luki, "perhaps we can go together to the islands. Dr. Gosney is just as hospitable as Mrs. Mustard, and there's even more ocean where he is."

More ocean and a lot more work, I thought, but I didn't say so. I went off to join Emma Mustard, telling myself that I would doubtless feel different about Luki and the new outpost after a week or two of just plain uninterrupted rest.

Mrs. Mustard's cottage turned out to be a jointly owned house on the outskirts of the small fishing village which supplied the colony with seafood. Groups of ranchers had built these houses along the beach to escape the tropic heat of the interior. They took turns vacationing here and, while the accommodations were rough, the canteen kitchen provided good food and the people were cordial and friendly.

For me, just lying in the sun on the sand was a luxury, with an occasional swim for cooling off. When I began to feel bored, I strolled the beach, picking up shells and specimens of marine life, looking for the unusual in native fauna and flora.

It was during such a stroll, near the end of my first week of vacation, that I discovered the alarming fact that cut short my holiday. Only that day at lunch we had been discussing the remarkable extermination of the toads. Mrs. Mustard had introduced me as one of those responsible, and I had listened all too complacently to extravagant words of praise from all present. I thought it no more than my due, considering the work I had done and the dangers I had faced. But I did have wit enough to turn their praise to Dr. Thursby and his constant concern for their planet.

At this point, a village girl serving in the canteen spoke up.

"We never had many toads here," she said. "Only now and then and at this time of year. Come to think of it, I saw one on the beach yesterday."

"Impossible!" I cried. "And if you did, I'll wager you'll see him dead tomorrow."

There was a general uneasiness apparent then, while I tried hurriedly to remember whether Goz had dropped any infected specimens in this vicinity. No, I recalled his saying that they were never found near the ocean. They were not sea creatures at all.

Having settled this point in my mind, I assured the colonists that the girl must be mistaken. Probably she had seen an unusual type of crab.

j'tly afternoon stroll along the beach was now made with a very definite purpose and I walked farther and longer that day. Not hard for me, as I enjoy getting off by myself and having a chance to see more of the natural environment. I had about decided that the girl didn't know a toad from a turtle, when I spotted something red far down the beach. It was just crawling out of the surf, and by the time I caught up with it, the creature scuttled on into the dunes. Arming myself with a piece of driftwood, I set out in pursuit. A vigorous thrust brought it around on me in angry defiance.

I was face to face with a Toxic Toad, and one very much alive!

Astonished, I backed up, alert for any attack, although I realized I should be trying to catch it. So the toads aren't supposed to be sea creatures, I thought! So they don't like the ocean! Wait till I report this to Dr. Gosney! He'd better get down here with an infected specimen! Then I remembered that Goz was beyond the Heat Barrier and there weren't any more infected specimens left. We'd released them all and they must be already dead. The disease had run its course, as far as we knew. Were we going to have this problem start all over again along the seacoast?

Even as I made my way back along the beach, another toad pulled out of

the surf, halting me almost in midstride. I waited and watched while three more dragged themselves from the waves to disappear among the dunes, following the trail of the first one. Then I turned and ran, pounding down the beach, into Emma Mustard's house, demanding the use of the communication radio.

"Whatever for?" asked Mrs. Mustard. "You're supposed to be on vacation."

It took a little while to get the radio working and a bit longer to locate the professor. At last he answered.

"Hello there, Gil! I trust you're having a good time at the seashore. Is there anything wrong?"

"Anything wrong!" I echoed. "Only that the toads are back! There's a migration in progress. They're coming right out of the ocean. Somebody had better get down here quick!"

## THE THURSDAY PRIMITIVES

I had rather expected that the professor would send Luki down to deal with the situation and had anticipated combining our work with a swim in the ocean. Instead, Dr. Thursby came himself.

"Luki crossed the Heat Barrier two nights ago," he told me. "I had no excuse to keep her on routine work now that they're giving me some decent lab assistants. Hope she's happy at her new job."

He listened to my story about the ocean-going toads and then followed me down the deserted beach. We stood together on the dunes and watched two Toxic Toads emerge from the surf and make their way inland.

"This just proves," he said at last, "that you can't have a successful program without the basic field work. No matter how long it takes."

However, he did not seem greatly discouraged by this setback. One of the characteristics that endeared Cyril Thursby to his co-workers was his refusal to admit defeat. Now he simply accepted the disagreeable facts and proceeded to consider what must be done.

"Who would have thought they were sea-adapted?" he muttered, as he unpacked his equipment. "All the reports have placed them only in streams and ponds. That's where I first found them. And who would have suspected that they migrate? On a planet where great migrations should be impossible! But there you are. Not enough life-cycle studies. Just hurry, hurry! Get results!"

His irritation was mounting, and I tried to think of some helpful remark. But just then another toad crawled out of the sea, and the professor went into action. Waving his collecting net over his head, he brought it down unerringly over the unsuspecting creature. Immediately the net heaved as the toad struggled to escape.

"Come on, Gil!" he urged. "Let's get things cleaned up here at least."

Under his direction, I held the net while he rummaged in his bag for a vial of antitoad virus and his hypodermic. Deftly, the professor inserted the needle through a crack in the leathery armor. Then we released the angry toad in the dunes, where it could begin the work of spreading the epidemic.

We worked along the beach for the rest of the day, catching and infecting toads. By evening Dr. Thursby decided that we had probably taken care of this bit of territory. But all the way back to the village, my chief puzzled over the new development.

"I suppose this *is* a migration," he worried. "And does not mean that the beasts are sea amphibians of some sort, spending half their lives in the sea and half on land? Which is possible. I thought we had things under control—and now this! Not enough field work. Not nearly enough. I fear your vacation is over, my boy, for the time being."

I assured him that I quite understood and was willing to go to work immediately.

At supper in the canteen, he made a little speech, explaining that we had to expect little pockets of toads to turn up here and there, and that he and"I had just taken care of this batch. Then he announced that we would both be leaving in the morning, and went off to bed.

We were back at headquarters by the next afternoon, and I then learned that I was to fly to the islands beyond the Heat Barrier.

"I expect you to be much more thorough than I was able to be when I was there," my boss told me. "I didn't see a toad, but I had only a few days. You'll have to really dig them out. Seems incredible that they could be coming from beyond the Barrier, but we can't rule out any possibility."

So I was to join Luki and Goz at their outpost—see what I could discover—while Dr. Thursby continued his lab work here. There was a supply car flying to the other hemisphere that night. I did some fast packing and was at the airfield with the professor well before the scheduled departure.

Chuck Witherspoon was the pilot and he was not pleased to see me. He

pointed out that a large crate of needed supplies was being unloaded to make room for what he obviously considered an unnecessary passenger.

"Have to watch the weight," he growled. "If we had to put down inside the Barrier, it might well be the end of us. And you must weigh at least two hundred pounds."

"Don't be ridiculous," I said. "One-fifty last time I hit the scales."

"Then you haven't hit 'em recently, I'll wager."

The professor surveyed me quizzically. "Well, Gil, come to think of it, you seem to have filled out a bit since we first met."

I've always thought of myself as the beanpole type. A little stoop-shouldered, because I'm not short. But all during college, I never was able to put on a pound, so I just sort of took lack of weight for granted. Since coming to Thursday, I'd been too busy even to think about such matters.

The pilot nodded toward one end of the shed. "There's a scale down there. Why don't you settle the argument."

So I climbed onto the thing and adjusted the mechanism. Then my eyes popped. One hundred and eighty-five. It wasn't possible. Why hadn't I noticed? Maybe I had let out my belt a few notches. But in this climate one hardly ever wore a jacket. Just shirt and shorts. Things inclined to stretch, or which lead you to believe they've shrunk.

Both Dr. Thursby and the pilot peered over my shoulder at the meter, and I felt warm with more than just the general heat as I got off the scale.

"Not far off the mark, was I?" crowed the pilot. "See why we took out that big crate?"

"Well, you're getting something far more important than any supplies," said my chief. "I don't care what's in the crate. It can wait till next time, but he can't. Important work ahead. And you can't say that we've treated you badly, Gil. You seem to have really blossomed under pressure!"

So I climbed aboard after Witherspoon, and the professor waved us off.

"Tell Luki to put her mind on the toad problem," was his last order. "Don't let her get too sidetracked on anthropology. That can come later. This problem can't wait."

I waved back as assuringly as I could. But how one kept Luki from doing anything she had set her mind on was one problem I'd never solved.

Chuck Witherspoon became more friendly as the flight progressed. It was uneventful, but I was glad we were doing it at night. Even with the sun down, the heat was overpowering. The air conditioners worked hard, and what such travel must be like in the daytime, or without proper air conditioning, I didn't care to speculate.

Perhaps the heat made me drowsy. I fell asleep, and when I woke, I realized that dawn was not far off and we had reached cooler latitudes. Beneath us spread a great ocean, broken here and there by a lonely island. Away on the horizon was a white cloud which Chuck pointed to as our destination—the largest group of islands in this hemisphere.

"They're not exactly rich in living space down here," he added. "Plenty of water, if you like salt water. But I suppose if you're about to make a crash landing from space, you don't have much choice. And then once down, there's no crossing the Barrier, unless you've got something like this baby." He patted the controls. "Sure glad we aren't stuck on this side of the Barrier. You met any of the abos yet?"

I was sure the ancient epithet carried no liking. I told him no, and he grunted.

"Queer birds. Seem to think they're the chosen people."

"Maybe they are," I said. "What are they like, really?"

He didn't answer that. Perhaps he didn't know. Instead, he lectured me on how they shouldn't act so superior. All they had was a few lousy islands. Whereas the proper colonists had a large and fruitful land. Maybe a few problems, as who hasn't. But now that Dr. Thursby has really taken care of the toads...

I didn't want to argue with him, either about the natives or Dr. Thursby's victory over the toads. So I watched the limitless ocean below and wondered how those small monsters ever made their way across it. Were some of them swimming down there right now? A continuing migration? That was what I was coming to find out—what made me more important than that crate of supplies. But I wasn't going to enlighten Chuck Witherspoon.

A new wave of confidence made me square my shoulders as I peered out the window at a land that was coming up fast. And when we set down, Luki was waiting in the little clearing. She ran up to greet me, and I felt confident enough to give her a hug.

"Oh, Gil, you're here! Oh, I'm so glad! Dr. Thursby sent word you were

coming, but I couldn't believe it was this soon. Oh, it's wonderful here, Gil. You'll love it. Just wait till you see them! Just wait!"

"Just you wait till you hear what I've got to say," I told her. "No, not here—in private. Can't we have a few minutes alone?"

She led me to the little group of shelters serving the outpost's personnel. There was a main prefab that housed the kitchen and dining facilities, and a smaller one for lab work. Surrounding this central area were tents of varying sizes.

I was pleased to have Luki show the way to a small tent on the outskirts of the clearing. She pulled back the door flap and I heaved my bag inside.

"I got you a place by yourself," she told me. "But I can't guarantee how long it'll be this way. At the rate new people are arriving, there will soon be more people than places for them."

I looked at the single cot, chair, and table which the tent contained and wondered how such cramped quarters could house more than one person, but Luki assured me it could be done.

"Just take out the chair and table, and put in another cot. That's what happened to Dr. Winters, the linguist, when I came. And if she'd refused to share with me, they'd have given me this tent and you'd be squeezed into the large dorm."

I thanked Luki and the unknown Dr. Winters for saving me from the dorm. But I had other things on my mind than the sleeping arrangements. Sitting down on the cot, I motioned her to the chair.

"I'm sure they'll fix things up more comfortably in time," I told her. "But right now I've got news—bad news."

I told her about the reappearance of the toads along the coast, and of Dr. Thursby's theories about migration. To my surprise, she did not seem especially disturbed.

"There's a lot more field work to be done," I persisted. "And you and I have got to do it."

"Oh, I'm sure you won't have any trouble," she replied. "There's every facility here, and I'll help when I can. But right now I'm helping Jania with her list of words."

"But that's an order!" I protested her indifference. "From Dr. Thursby. And who's Jania?"

"Dr. Jania Winters. The new linguist I told you about. She's from off-world and they sent her down here with hardly any briefing. I'm helping her to adjust."

"Well, she'd better adjust fast," I observed. "You and I are to work on the toad migration. That's why the chief sent me down here."

I spoke as positively as I could, with the weight of my new confidence behind it. Squaring my shoulders, I threw out my chest, hoping that Luki would notice my new thirty-five pounds. But I could see I was not registering on her attention as I should.

"I haven't seen a single toad since I arrived," she said coldly. "Of course, if you find any, I'll be only too happy to help. Now you'd better come and meet the rest of the team."

I followed her out of the tent and back toward the center of activity, and all the while my mind was sampling her statement. No toads. No toads at all down here. If anyone should know, it was Luki. Perhaps the professor was all wrong and this was a wild-goose chase. I wondered if I should alert him to search more carefully up there, but decided to wait till I'd convinced myself. After all, there were a lot of islands to search.

Luki showed me around the main buildings and introduced me to the small group that was servicing the base: the kitchen, power, and sanitation crews. As we approached the lab building, Dr. Gosney came out and gave me his usual warm reception.

"Welcome to the team, Gil! So you finally got here! You're looking great. I guess a little rest is good for anyone."

I followed him into the building and then stopped short as a man rose up from the floor. He seemed to uncurl his legs and grow to unexpected heights, so that once standing, his head just missed the roof of the prefab. As my eyes adjusted from the outside glare, I could see that he was almost naked, except for a short skirt of bark and a riot of beads, stones, and what not that hung around his neck. His skin was brown, every muscle rippling smoothly under it, and his face was both intelligent and handsome. He wore his hair shoulder length, tied back with a thong of vine. I guessed his age at the late twenties until I learned he was a chief. Then I added a decade at least.

"This is Najjar. High Chief Najjar, I should say," Goz introduced us. "Meet Dr. Abbott, Chief. He's come down to join the team. He's a good worker. I think you're going to like him."

Najjar extended a hand, and as I took it, he placed his other upon our two and shook them solemnly twice.

"Dr. Abbott." He pronounced his words carefully and clearly. "The sea will sing sweet songs for you."

Luki was smiling at me, as though to say, "Isn't he great?" I disengaged my hand as soon as it seemed proper.

"Just call me Gil,'" I said. "Everyone does. The name's Gillian Abbott, but you may find that rather complicated."

Still he said it right after me. "Gil. Gillian Abbott." And then, "Dr. Gillian Abbott. Dr. Gil."

Gosney laughed in his uproarious fashion. "He's got you pegged, Gil. But we don't use titles down here. Gil will do, Najjar. The chief comes almost every day to help with our language project and other studies. Now let me introduce our language expert, Jania Winters. I suppose she, too, has a string of titles from off-world. But we don't use 'em here, do we?"

The woman who stepped from behind Najjar and extended her hand was small beside him. She was wearing what was probably her field outfit and her brown hair was pulled back in a tight knot. She wore glasses which she now hastily pushed up till they rested on the top of her head.

"Dr. Abbott—Gil!" she exclaimed. "I feel that I already know you. I've heard so much about you from Luki."

Luki gave a little cough behind me, but I pretended not to notice. I felt a liking for Jania Winters at once, and as for Chief Najjar, I was captivated. Now I understood all the remarks and suggestions I had heard from innumerable people. To Dr. Gosney, the natives had guts. To the colonel and my chief, they were amazing. To the pilot, they seemed arrogant, and to Luki they were simply fascinating.

If all the natives were like their chief, they must be truly remarkable. No wonder everyone involved with this project became dedicated to unraveling their mystery. How had they come here? What ancient race from Mother Earth had bestowed on them such excellent genes? How had they managed to survive the crash of their spaceship, to live under hostile conditions, to retain through all disasters their sanity and humanity? And what kind of culture and civilization had they established here? Even when the language problem was resolved and we could fully understand each other, it was doubtful that they could remember their origins. Their myths and legends would have to be probed to find the answers.

I could see that it was an absorbing project and a long-term one. Nor could I blame Luki, with her original interest in anthropology, for wanting to forget the toads in favor of this work. After all, the toads had been taken care of. Finished. At least, it was pleasant to think so.

Now I followed Jania to her desk and was handed several of her lists of words. Every morning she had a session with Najjar, during which they pointed to various objects and repeated the names for them in their respective languages. Jania wrote down his words phonetically with the translation in Basic, and fed them into a small computer. She was gradually building a dictionary. In the evenings she tried to relate the new words to various ancient languages of Earth.

I looked at her list with interest. "Maybe I'd better try to memorize some of this," I said.

"Oh, no. Let him speak Basic with you. He's very good and he needs the practice. Luki and I are learning his language. Two is enough. No point in duplicate effort."

Well, Luki might be good at languages, but I knew such study wasn't my strong point. I accepted the decision, and shortly we all went over to the main building for the noon meal.

At table, I explained to Goz and the others why I'd been sent here. There was momentary silence as I described the new influx of toads and the professor's ideas about migration. Then Goz broke in with a loud exclamation.

"Don't you believe it! Not for a minute! You stumbled on a little pocket that hadn't been caught in the epidemic, that was all. There may be a number of such. But as soon as the creatures spread out, they'll catch the bug. Don't you worry. That's a powerful virus. Given time, it'll take care of every one of those critters up there."

"But Dr. Thursby sent me down here to investigate," I began.

"Oh, you go right ahead!" Goz boomed, clapping me on the back as he rose from the table. "I'd never interfere with an investigation. Never leave a stone unturned, that's the right scientific approach. But if you can find a single one, well, let me know. I haven't seen one all the time I've been here."

After this, I hardly felt that I could coerce Luki into following the professor's directives. If I turned up anything myself, fine. But as things were, it seemed she was better employed in the study of the natives themselves.

That night, sitting in front of my tent, she told me what had been learned so far. The island where we now camped was not part of the natives' home territory. Najjar and a group had come here to collect a special kind of shellfish, and while engaged in this hunt had met the first exploratory party.

Quite naturally, they were cautious at first, impressed if not cowed by the strange flying ship. Introductions proceeded slowly, and when Jania arrived, she was even more adamant about putting on the brakes. Nothing must be done to anger or frighten the natives or to cause suspicion. Even now we did not know which of the many islands was their home.

"Jania says that if we just go slowly, Najjar will tell us soon," Luki said. "He'll invite her to his village any day now. But if we push him, he might get nervous. It could set the whole project back for months!"

I could see what she meant, and I certainly did not want to be the cause of a break in relations, so I kept pretty much to myself. For several weeks I occupied myself in studying the flora and fauna of the island. Every morning I set off into the surrounding forest and worked until noon. Or some days I took a lunch in my pocket and did not return until evening. Luki and Jania might have their lists of native words, but I was compiling my own inventory of plants and animals. Very little work of this kind had yet been done. I took with me the lists that Gosney and others had jotted down casually, and amended or added to them.

Thus occupied, I seldom met Chief Najjar and his occasional companions. There was a native called Tabor who sometimes came with him, and one named Fergus. If not quite as impressive as Najjar, they were both equally vigorous, proud, and aloof. A small prefab had been set aside for the natives' exclusive use, and Goz gave orders that no one should disturb their privacy. Here they withdrew when not working with Luki and Jania.

Although I was not working directly to penetrate the mystery surrounding these people, I told myself that I was adding to our knowledge by studying their environment. The country might seem strange and forbidding to us at first, but I soon found that there was food for those who looked for it, and I did not doubt that the natives knew where to look. There was a water plant whose stems grew from succulent bulbs buried in the mud. Turning over the stones along the shore, I found species of amphibians which I presumed to be edible. None of these occurred in the other hemisphere, to my knowledge. I took samples and wrote descriptions. Soon I had a goodly collection of specimens in my corner of the lab—but I saw no sign whatever of the Toxic Toads.

Then one rainy day, as I worked at my desk, a thought struck me. Surely, if

there were toads in these islands, the natives must know of them. I looked down the long room to where Najjar sat, his head bent to hear what Jania Winters was saying. What, I wondered, was his word for the creatures? Had it been recorded yet by the anthropologist?

With this in mind, I made my way down to their section of the lab. Luki looked up from her note-taking and frowned at me. I knew that both she and Jania demanded complete silence of anyone observing their work, lest an interruption disturb the native and possibly lose some helpful bit of information. So I waited patiently for a break in the talk. At last there was a pause, and Jania looked up questioningly.

"I was just wondering," I began, "if the natives might have a word in their language for the Toxic Toads. Could you ask him? Because if there isn't one, it should prove..."

"I really wish you wouldn't bring up these nonessentials!" Jania interrupted crossly. "We've barely touched on the flora and fauna, and you just can't hurry this kind of study. I assure you, nothing of the sort has come up so far. At least, he hasn't mentioned it."

"And how can we ask him for the word, when we don't have one of the animals to show him?" Luki put in.

"The trouble is, none of you people realize that this can't be done quickly," said Jania in an aggrieved voice. "It's a very delicate process."

"And there are more important things to learn, Gil, than the word for toad," Luki added.

I had heard this complaint before, about things that could not be done quickly. It was common to all science. So I gave up and retreated to my alcove, under the curious stare of the native chief. Najjar did not yet know enough Basic to follow this exchange, but I could read the interest in his face.

As I sat there, my resentment grew. Why should Jania and Luki monopolize the natives? Of course, as anthropologists and linguists, such research was their province, but why not help another scientist with a simple request like this? I considered Luki's remark about having no toads to show him. Surely, there was a way to cut across the language barrier.

Right then I seized a piece of paper and soon had a presentable drawing of the planet's infamous animal, sitting up in its threatening posture. With this in hand, I again stepped across the room and waited for another pause in my colleagues' work. Jania's frown might have subdued me a few months ago, but not any more. I stood my ground.

"What is it this time?" she demanded.

I saw she was ready to repeat their rules about interruptions, but I prevented her by shoving the drawing under her nose.

"Can't you just ask him if he's seen anything like this?"

She waved it away and put on her frostiest "Dr. Winters" look. But not soon enough. Najjar leaned forward to look, and then the situation exploded.

The chief sprang to his feet and seized my sketch. At the same time, he let out a roar that might have been anger and might have been surprise.

"Tota!" he cried, or what sounded like that. "Tota!

No, no! Not for you!" And a torrent of incomprehensible words rained over us and battered our senses.

Jania stood up and quietly confronted him until the tirade ended.

"We agreed," she reminded him, "to use only words that both of us could understand."

For a long moment their eyes met and held, and then Najjar rushed from the lab and both women were shouting their outraged objections at me.

"What do you mean, interrupting like that!" Jania was fighting mad.

"He may never come back!" cried Luki, almost weeping. "What was on that paper you showed him?"

"Only a drawing of a toad. I thought he might recognize..."

"You thought! You thought!" Jania was indignant as well as furious. "You know you should always ask first! Toads may be taboo with them—something that can't be mentioned. This sort of thing can set our work back for months!"

I felt sufficiently chastened, although I had tried to show the drawing to her, not Najjar. There was no doubt that he had recognized it. So the natives must know about the toads. You can't have a taboo on something you haven't seen. So the toads must occur in this half of the planet, too. Or if not now, they surely had been here at some time in the past. Perhaps this lent weight to the professor's migration theory.

But neither Luki nor Jania would listen as I expounded my ideas. I had

upset their work and they just weren't talking to me. When they did calm down and get back on speaking terms, I was treated to a lecture from Jania on the proper attitude of a scientist, which included patience and careful work and no hurrying after results. And most especially, respect for the work of others. Luki contented herself with saying, "How could you, Gil? How could you?"

I might have gone to Goz with my problem and protested the women's attitude, but my pride wouldn't let me. I'd show them who was meticulous and careful about experiments! I'd find the toads, no matter where they were hiding! Probably the professor was right after all, and these two stubborn girls insisted on ignoring him and following their own ideas.

As soon as the rain stopped, I gathered up my gear and set off into the forest. It was restful to be away from the turmoil and the criticism. Even though I had neglected to bring food with me, I stayed away past the noon hour. I told myself I could hold out until supper-time and I plucked some mintlike leaves that I'd tested in the lab and chewed them as I moved through the woods.

Presently, I came to the sea and made my way to the shore. I sat down with my back against a great rock and watched the waves come in, remembering that other time I had watched the breakers and seen the red forms of the toads scuttle up the beach. But nothing like that happened here, and I was just wondering if I might take a half hour for a swim, when I heard voices on the other side of the rock.

They were not any voices I recognized, or any words, and I realized I was listening to the natives talking in their own language. At once I was on my guard. I did not want to risk another major breach of etiquette. But I suffered from mounting curiosity. Was Najjar one of the speakers? Was he telling his friends about my breaking the taboo? Were they all about to depart forever?

At this point, I decided that perhaps I could save the situation. Just possibly I could apologize. Very quietly, so at not to betray my presence, I crawled to the side of the rock and peered around it.

Beyond was a little bay, and floating on the water was a raft. A crude raft, with one upright spar which might be used as a mast, though no sail was now in evidence. The raft was moored to shore by a length of vine, and holding the shoreward end was Najjar and his friend, Tabor.

I must have been watching them for five minutes, wondering how I could best approach them, when I heard my name called.

"Dr. Abbott! You—Dr. Abbott! You—Gil!"

Their sharp eyes had picked me out where I thought I was concealed. I got to my feet and came around the rock.

"Najjar!" I said, trying to put warmth into my voice. "Najjar, forgive! Sorry—regret!" Why hadn't those women filled me in on which words the natives had learned! With a great effort, I made one last try. "Friends!" I cried, holding my hands out in entreaty as I approached.

To my amazement, the chief showed no sign of anger.

"Friends!" he replied, and went through the ritual of shaking hands with his two cupped about mine.

I made a great show of being nonchalant but friendly.

I looked at the raft. "You go?" I asked. "You come again?"

"We go," said Najjar. "We go home island."

"All of us sorry," I said, hoping to repair relationships. "I am sorry. Luki sorry. Jania sorry. Dr. Gosney sorry. Everybody sorry. When you come back?"

Najjar didn't bat an eye. You would have thought there'd never been a big scene at the lab.

"We go home," he said. "We come again."

As he spoke, Tabor waded out into the water and boarded the raft. But Najjar lingered. He was staring at me, but I could not guess his intent. Finally, he seemed to come to a decision.

"Dr. Abbott," he said. "You friend. You come with us?

He must have read the surprise in my face. "Dr. Abbott," he repeated, "we friends, you know." And he made the motions of shaking hands.

I could not think what to say at first or what his offer implied.

"Gil," I reminded him. "Call me Gil."

I realized this wasn't bringing us any nearer to an understanding, but just then the native reached into his little skirt or kilt and pulled out my drawing of the toad. And I had thought he'd thrown it away!

"You want Tota?" he asked, pointing to the sketch. "You want to find? You come. I show you!"

All at once I saw what I was being offered. I had stumbled onto the prize! Nobody in the whole outpost had ever been invited to visit the natives' home island. I knew it to be a carefully guarded secret. But I was being given the chance, as well as information about where the toads could be found. This would put Luki and Jania in their places! All their talk about patience and science! Without further hesitation, I waded out to the raft, and the two natives pulled me aboard.

Of course, I knew that I was acting foolishly. What I was doing was full of danger. Najjar might not be friendly after all. He might be planning punishment for my breaking the taboo. Or this unstable craft might be wrecked in a storm and nobody at the post would know what had happened to me.

Still, this was a bit of unparalleled luck and would put me well in the lead in our work with the Thursday Primitives. It was a chance too good to miss.

"All right," I told Najjar. "Let's go!"

# DOCTOR, HEAL MY SON!

I was no sooner settled in the middle of the raft, with the two natives kneeling on either side of me, than they began to pole us out into deeper water. The raft seemed remarkably steady for such a primitive craft, and I decided these people must know more about boat building and sea voyages than we had given them credit for.

But we were hardly out beyond the breakers when I heard shouts from the shore. My companions stopped poling and pointed, and there was Luki running up and down on the beach and calling. I could just make out her words above the sound of the waves.

"Gil! Gil Abbott! Where are you going? Come back here! I want to talk to you!"

The natives looked at me questioningly. Evidently, they would do what I said. My first inclination was to keep going and forget about Luki. But then I considered that if I explained matters to her, she could alert the base should anything unfortunate occur or if I did not return at a specified time. I knew I might have an argument with her, but she could hardly fail to realize the importance of following up on this remarkable piece of luck.

So I signaled the natives to put back on shore.

"Luki wants to talk," I told them. "We say a few words. We listen."

There was only a slight hesitation on the part of Najjar.

"You come with us?" he asked. "You surely come?"

When I assured them that I would not change my mind, they made no further objection and brought the raft up on the beach. Luki came running as we waded in through the waves.

"Just where do you think you're going?" she demanded. "Jania will think..."

I didn't wait to hear what Jania would think.

"Listen to me, Luki. This is an unbelievable opportunity. These men have invited me to visit their village. They've never done that before, have they? Think of all I can learn. It will advance the program immeasurably!"

"But how! Why?" Luki had stopped objecting and her eyes were almost popping out of her head. "There must be some reason! And after what you just did!"

"Perhaps *it's* because of what I did. Maybe Jania's all mixed up about that taboo business." I could imagine Jania, with her precise, methodical ways, blowing her top when she heard about my spur-of-the-moment achievement. "Look, they've promised to show me where the toads are, too. Some other island, it seems. Now what I want you to do is to go back and say nothing about it until they begin looking for me. Then you can explain, and if I'm not back in about a week, they can send the aircar to look. But not before that. It might upset our delicate relations."

Luki stared at me and for once she had nothing to say. I could imagine what she was thinking. Here was I, the outsider, not really working with the natives, and they had picked me to show their tribal secrets! What had I done to deserve this, when Jania's patient plodding and Luki's warm-hearted friendliness had failed?

All at once she spoke. "I don't like it. I don't like it at all. I'm going with you!"

"But you can't!" I cried. "You mustn't! They haven't asked you!"

Immediately she turned to Najjar and began talking in his language—something I could not follow at all.

I continued to tug at her arm. "Don't be foolish. It's not a woman's work."

However, the natives were joining in the talk with Luki, and she pushed my hand away.

"Please allow me to judge what is or is not a woman's work. They have both said that they'll be happy to have me come along."

"But you don't realize!" I protested. "That raft is very shaky. We're going out to sea. It may be rough —we may even be sunk!"

It was plain that I'd lost the argument. The natives hastened to help Luki onto the raft and stood waiting for me to follow. There was nothing else I could do. Now I saw I was worse off than before. I'd have her to look after and defend as well as myself. It was all a crazy, harebrained thing, and we were breaking all the rules of safety. But it was an opportunity that neither of us could resist.

I sat down in the center of the raft, my back against Luki's, and watched as Najjar and Tabor poled out to sea again and then set up a primitive little sail. That was made of woven leaves, and they fastened it to the mast with ropes of twisted vine.

After awhile, Luki spoke. "I know you're angry, Gil. Please don't be. I couldn't let you go alone, and I don't think I could have stopped you. I'll be a help, really. I'll be able to translate for you. I'll know what they're saying. I can understand more than they realize."

"It'll probably be very dangerous," I said huffily. "We don't even know how long the trip will take. We could easily roll off this thing in our sleep. I was a fool to let you come!"

"You didn't let me," she said. "I just came."

"It's a bad habit you have," I told her. "Never listening to anyone else."

"Well, we both know why we came. We both want to learn something and this was the only way. You want to learn about the toads, and I want to learn about the people."

With that, a kind of truce was established between us, and we were back on our old, friendly footing. Still, it seemed to me that I had just switched from protecting Luki from the toads to protecting her from the natives, and it was a job I could have done without.

However, I had to hand it to Najjar and Tabor. They knew all about sailing that raft, and they understood the winds and currents. They watched the weather and assured us that at the first sign of a storm they would head for a safe harbor.

Toward evening, they brought out food from a storage bin at the stern. They even made a fire with coals in a little pot and served us a hot meal. It was very pleasant and peaceful drifting along, with the splash and sigh of the waves a soft accompaniment as we ate. I began to feel greater confidence in our crew and assurance that we would eventually reach our unknown

destination safely.

Luki felt it, too. "You know there were peoples on Earth like this," she spoke softly to me, though there was small chance the natives could follow our conversation. "Long before the Space Age and the Great Crossings, when there were still primitives on that world, some peoples traveled the great oceans on rafts. I've read about them. It was much like this."

"Perhaps they were the ancestors of these men," I suggested. "They could have revived their art here."

"We've thought of that," she said. "It's a clue. If just one member of that old expedition was a Polynesian and he survived the crash! Also the Arabs were ancient seamen and some words and names we have recorded have Arabic roots, like Najjar. We've sent for lists of all those ancient crews and information about individual backgrounds. But we don't have the answers yet."

When night came, Luki and I settled down in the part of the raft assigned to us. She fell asleep at once, while I tried to stay awake and on watch. But the rhythmic sound and swing of the sea put me to sleep in spite of my intentions. I was tired from my labor in the forest and all the subsequent excitement. In the morning, I felt embarrassed when Luki woke me. I apologized, but she only laughed.

"We're perfectly safe," she said. "And if we weren't, what could we do? We've got to believe in them, and why shouldn't we? Look at them. See anything untrustworthy about them?"

I had to admit that both Najjar and Tabor appeared friendly and honest. Tabor did most of the work, but Najjar gave the directions and made the decisions, as far as we could see. The rest of the time, the chief sat near us and carried on a conversation in a combination of Basic and his native language. Luki had no trouble communicating, as she had learned so much of his tongue, and when I lost the thread, she translated.

So it was on the third morning out that Najjar pointed to an island we were passing, crying, "Tota! Tota!" He said more to Luki and her face brightened.

"He says that's where you can find the toads!" she cried. "They come from that island. I hope I've got it straight, Gil. He seems very sure. He says we'll go there later."

"Why not now?" I demanded. "As long as we're here."

But the raft went stubbornly on, while Luki and Najjar exchanged words.

"He says it's not the right time now," she told me at last. "Seems to be some kind of seasonal rite. Perhaps they've made the toads into a religion of some sort. That would account for the taboo and his getting so upset."

She stopped to listen to Najjar, who was talking earnestly again.

"He says they're taking you to see his son." Luki was puzzled now, and put several questions to the native.

"His son? What for? Did he ever mention a son?"

Luki waved me to silence as she listened to the chief's story.

"You won't believe this, Gil," she said at last. "He's taking us to see his son, who's sick—very sick. He expects you to cure him."

"Me?"

"Yes. He thinks you're a doctor. He's heard of the miracles of our medicine."

"But why me? He needs Gosney!"

It was getting to be too much for me, and I spoke directly to Najjar.

"I'm no doctor," I said as positively as I could. "Not doctor. Gosney doctor. You know, Dr. Gosney?"

Najjar looked unimpressed. "You doctor. Dr. Abbott. Dr. Gosney tell me. You doctor, too."

"But that's different," I said. "That's only a title. I'm a different kind of doctor. Not a medical doctor. Oh, blast it!"

I could see I was not getting through to him at all.

"Can't you explain to him the difference between a medical doctor and my title?" For the first time in my life, I regretted my degree.

"I've been trying to," said Luki, "but I don't seem to be getting anywhere. I remember very well hearing Goz introduce you as Dr. Abbott. Now I'm afraid Najjar thinks we're just trying to kid him."

"But why didn't he take Gosney in the first place? He's obviously the better man."

"Najjar doesn't think so. He says he's too old."

"Too old!" I had never thought of Goz as old. He was probably in his late thirties. Certainly quite a bit older than I—but there was no comparison

between our training and abilities.

"Don't worry," Luki soothed. "There's probably nothing much wrong with his boy. And I've got a few simple remedies along. Some fevercaps and painkil. You'll be able to fix him up and if not, we'll take him back for Gosney to look at."

But I didn't feel at all easy. There was something very odd about this. Instead of being taken to see toads, I was to be shown a sick child. Luki tried to reassure me by saying that in the old days all explorers took medicines with them to treat the natives. No doctors were usually available, but just the simple remedies they had in those days of early medicine would often effect cures and win the eternal gratitude of the people. Half the time it was probably psychosomatic. The natives wanted to be cured, and so they were.

But although I followed Luki's suggestion and assured Najjar, when he questioned me, that I'd be happy to look at his sick son, I felt little confidence about the outcome.

That afternoon, another island grew on the horizon, and by sunset we were pulling the raft up the beach. Najjar had told us that this at last was their home island. With many shouts, he and Tabor ran up a trail into the forest, with Luki and me following.

We came out into a large clearing, with huts arranged haphazardly. Some even could be seen among the trees beyond the borders of the village. They were all round, their thatched roofs being their most obvious feature.

Many were entirely open at the sides and seemed merely a roof protection against direct rain and sun. Luki was anxious to examine the building methods and make notes on materials and patterns to take back for the program study. But she realized this would have to wait for the moment—until we had satisfied the customs of greeting and welcome.

We were led without delay to the largest of the buildings, one which had solid walls on three sides, appearing a more ambitious structure. At the entrance we were met by several women, who greeted our guides with every show of affection. Najjar placed his arm around one of them and led her to us.

"My wife!" he said. And then, "My new friends, Luki and Dr. Abbott."

I felt like interjecting, "Just call me Gil." But I could see this was no time to do so. We had been followed through the village by an ever-growing crowd of natives, and they waited expectantly, staring at Luki and me, reaching out

to finger our clothes and touch Luki's fair hair.

Najjar had a hurried exchange of words with his wife. She appeared to be much older than he, and a question began to grow in my mind. Was this perhaps a matriarchy, where the women ruled and selected younger mates? And yet this did not seem consistent with the proud, confident bearing of the men that we knew.

Najjar did not leave me time to consider these points.

"You come now," he said. "You come see my Bejma. Very sick boy. Need your help."

Well, this is it, I thought, as I followed him into the house. We went through the outer room and past a screen which divided the long house. Light was dim, and I moved carefully so as not to trip over anything. As I stood uncertainly, Najjar took my arm and led me forward.

"There," he said, pointing.

A figure lay on a pile of coverings, spread on a kind of shelf against the wall.

"My son. You give him help. You cure him."

I stared for a long moment, unable to believe my eyes. Instead of the child I had expected, the occupant of the bed was a very old man.

Then Luki moved up beside me and I heard her gasp.

"Gil—look! There must be some mistake!"

"There certainly is. That must be his father, not his son. Or maybe even his grandfather!"

For once Najjar got the drift of what we were saying. He almost jumped up and down in his anger and irritation.

"Not my father!" he screamed. "My son! My son, Bejma! Very sick boy. You cure him. You cure him now!"

## THE CHILD IS FATHER

For a moment, shock held me completely. I was not only being bludgeoned into practicing medicine, about which I knew little or nothing, but the patient was no ailing boy, running a childhood fever which might easily be controlled by one of our standard fevercaps. This man appeared to have all the symptoms of old age, was perhaps even close to death.

Luki tugged at my arm. "You'd better make the pretense of examining him," she whispered, as she knelt beside the bed.

Laying one hand on the man's forehead, she took hold of his wrist in a very professional way. Luki would have made a good nurse. But I found it hard to produce a corresponding bedside manner. Still, I squatted, beside her and tried to look knowing.

"There's something very peculiar about this," I muttered.

"You're so right," she said. "I'm beginning to have strong doubts about Jania."

"Jania! What's she got to do with it?"

"She must have mixed up the words for son and father. It's the only explanation. And Najjar learned them wrong. She was well past that in her word list when I arrived, and I simply memorized what she already had."

"In the meantime, what are we going to do? Najjar expects me to work a miracle."

"We'll have to use the remedies we have with us and then persuade them to take the poor man back to the base. Maybe Goz can do something for him."

Luki brought out her aid-kit and counted out a good dose of painkil—under the fascinated stares of all the natives who had been able to crowd into the house. As the patient did not seem to be suffering from any infection, we passed over the biocaps, but decided to risk a pep pill and a heart stimulant. Upon the urging of his friends, the old man quickly swallowed the medicines and looked hopefully in Luki's kit for more.

"That's enough!" she declared, putting it back in her pocket. "We don't want to kill him. Now tell Najjar we'll have to wait and see how this treatment works. Act professional, Gil!"

I'm no actor, but I tried to live up to her demands, and suddenly it became easy.

"That's all now," I told Najjar. "Let him sleep. We see in the morning."

The chief seemed to be satisfied, and I was not inclined to get into another dispute with him about the father-son relationship. Let Jania figure out the mistake later. The old man lay back on his bed and fell asleep, and Najjar ushered us all into the outer room.

"Now we eat!" he proclaimed. "We give feast for great doctor who saves

my son!"

Once we had time to observe our surroundings, we saw that the great majority of natives here were women, with a scattering of children. They hurried about, cooking food over little fires, bringing platters and bowls. Najjar made Luki and me sit beside him at one end of the hall, and the food was served to us there. He was in high spirits and kept thanking and congratulating me.

Luki and I were less cheerful. We realized that there might well be variations in the metabolism of these people, isolated on a different world for many centuries. What if the patient were to react negatively to a drug that was perfectly safe for us? Moreover, I thought Luki should get most of the credit. After all, it was she who had brought the drugs and decided which to use. But Najjar persisted in believing that it was all my work; that I had given the orders and Luki had merely carried them out.

"Let him think what he wants," she whispered. "Just hope we have done some good."

By the time we had finished eating, it began to look as though our hopes might be realized. Najjar's wife came bustling out of the back room with word that the patient felt much better. The chief almost knocked over his cup in his haste to see for himself. When he returned, he was supporting the old man. Smiling broadly, the patient hobbled over to some mats, where he was soon happily eating the food they brought him.

Najjar was almost weeping, and the women were chattering excitedly to Luki.

"They say it's a miracle," she translated for me. "He hasn't been this well for months. They think he's cured, but of course it will only last till the painkil wears off. The poor guy's obviously crippled with arthritis."

I had to submit to handclasps and backslaps from everyone, but all the time I was thinking of that deadline Luki had indicated. We could not continue to ride on these false hopes.

I took Najjar aside and tried to make him understand.

"Not a cure," I repeated. "Only for a short time. Only for tonight. Tomorrow he will be sick again."

Najjar's face clouded. "But you cure again?"

"No," I told him as forcefully as I could. "No good. This short-time cure. These short-time medicines. You bring him to base. Let Dr. Gosney try.

Much better cure there."

Najjar frowned. "Long trip to your island. We come long way. Bejma cannot do. My son cannot ride the sea again."

"But that's unnecessary!" I cried, getting a bit outside his vocabulary. "We get Goz. He can come in ship that flies. He can take Bejma back to base and cure him there. You'll see."

Najjar appeared to be convinced, but Luki shook her head.

"Don't promise what you can't deliver," she whispered. "How are we going to get Goz and the aircar? We'll have to let them take us back, and they may not want to do that."

"That's no problem," I told her. "The base must have a search for us underway by now. All we have to do is signal. A good big fire should do the trick. Fire by night and smoke by day."

When we explained what we wanted, Najjar quickly agreed. He knew all about fire and smoke signals and soon had the women and children collecting wood for a bonfire on the beach. As a matter of fact, we did not have to put their smoke signals to the test. Our fire was spotted that night, and in the early hours of the morning an aircar put down on the sand a hundred yards from where Luki and I were tending our beacon.

Two men climbed out, and in the dawn light I saw Chuck Witherspoon followed by Goz. In my relief at seeing them, I realized the load that had been weighing on me. Now I was no longer responsible for a man's life and for our good relationship with the natives—in fact, for the success of the entire project.

I brushed aside the questions and rebukes that Goz fired at me almost before we met.

"Yes, it's all my fault! I admit everything. But right now we've got an emergency on our hands. A medical emergency. And I think you'll find it's also a major breakthrough."

He stopped his lecture and looked at me. That was one thing about Goz. He could sort out what was important and what was not.

"All right," he said. "Where's the patient? I gather it's not either of you."

"It's Najjar's son," Luki told him. "At least, he says he's his son, but Gil and I think it must be his father."

We were hurrying up the path to the village, and Goz paused to stare at the

two of us.

"Well, make up your minds. There should be a considerable difference. Or have you two contracted some sort of island fever that addles the brain?"

"Just give us your opinion," I said. "We'll accept that."

Goz looked mystified, but he said no more and followed us to Najjar's house. The chief had heard the aircar, and he came out to greet us.

"You come, Doctor? You come to help? The sun god shines more brightly now you are here."

Then he led the way inside the house and pointed out the sick man.

"You cure him, Doctor? You cure my son. He very sick boy. You cure Bejma maybe?"

I noted that Najjar had given up demanding and was now asking. But even more interesting was the expression on Dr. Gosney's face.

"I see what you mean," he muttered as he knelt beside the patient.

Then for a few minutes he was busy, taking Bej ma's pulse, looking into his eyes, going through the preliminaries that doctors use. At last he looked up at me.

"And what did it occur to you to do?"

"Luki had a few drugs. Medi-aids, you know. We tried some of them."

Goz made her describe what she had used and listened to our account of the results. When we were done, he drew Najjar aside in consultation.

"They've done their best for now," he told him. "All we can do here. He must be brought to the base. With the aircar it will be easy. Just wrap him up in those blankets or whatever you have. Luki, can you translate? Have two men carry him down to the car. We'll make room for him in the cargo hatch. Najjar can come and you two, but that's all we have room for."

While Luki translated and got them to moving the sick man, I ran ahead to alert the pilot and prepare a place for Bejma in the hatch. Goz stood for a moment in the village yard and looked around.

"Aren't there any *young* women?" I heard him ask Luki. "Not much like the men, are they? Odd. But I suppose they do all the work."

That's not the oddest thing, I thought. And once we were settled aboard, with Najjar and Luki beside the patient and Goz and me squeezed into the

cockpit with Chuck, I tried to sound him out.

"What do you make of this father-son business?" I asked. "You heard what Najjar said."

"I heard all right. But remember, he's just learning Basic. This poor man must be his grandfather. He's suffering from nothing more unusual than old age. I'll have a few things to say to Dr. Jania Winters when we get back."

As the car zoomed up into the air and circled to set its course, I looked back and saw that the natives were getting out their rafts. Najjar had left orders with Tabor and others to follow by sea. Now in the hatch, he was concentrating all his attention on the patient. I was touched to see the care and affection that the chief lavished on the old man. Whatever culture these people had lost during their long isolation, they still retained respect and love for their old folk.

# RITE

#### OF PASSAGE

When we reached base camp, Dr. Gosney's first action was to get his patient installed in what he called the private ward of the post's hospital hut. It was no more than a corner room, partitioned off by curtains. Bej ma was immediately put to bed, and two orderlies assigned to cleaning him up and recording his blood type, blood pressure, and such routine facts.

Najjar insisted on sitting like a watchdog in the outer room, but Goz retired to his private office in the lab hut and summoned Jania Winters. This was a confrontation that neither Luki nor I wanted to miss, and we managed to find important work to do in the lab at the front of the hut—Luki at the files, I at a microscope.

Goz started in on Jania at once.

"Dr. Winters, with all due respect for your work, we have got to have better results on the language problem and we've got to have them fast!"

Jania bristled at once. "I'm sorry if there's any criticism of my work, but this kind of thing simply cannot be hurried."

"It's not only the slow pace you've been setting," he fumed. "It's the results. Now it seems that you've confused the words for father and son."

"Impossible!" cried Jania, pushing her glasses up on her head so that she could glare more convincingly at Goz. "That's quite absurd. These people, I believe, are of Indo-European stock. Their use of these key words goes

back to Middle English and even to Sanscrit. Thus, their word for father is Pither. As you may know, the Sanscrit is Pitar and the Middle English is Fader, from which we get father..."

"I don't care what the Middle English or the Sanscrit is!" Goz raised his voice sharply. "That's your field. My field is medicine and I've got to know..."

"But it's impossible to mix them up!" Jania interrupted. "The words are quite different. For son, the Sanscrit is Sunu and the Zend, Hunu. Middle English becomes Sone, from which, of course, we get..."

"Dr. Winters!" roared Gosney. "Forget about all that! We've got to know what the natives mean when they use these words. If you didn't mix them up, perhaps their ancestors did for some peculiar reason."

Jania Winters paused for a full minute's thought. "This is something I have never heard of in my entire career, and I've studied the cultures of seven planets."

"Well, it's something we've got to consider on this one," said Goz. "Come with me."

And taking the linguist by the arm, he led her through a back door into the hospital hut. Luki and I followed along and were able to watch Jania as the doctor pointed out the old man on the bed. Bejma was asleep, but the years were no less plainly marked on his face.

"Take a good look," said Goz. "Najjar claims he's his son."

I heard Jania gasp and saw her eyes widen. But then her mouth set stubbornly.

"If he says he's his son," she declared, "he must be his son."

"Oh, use your head!" cried the doctor. "I'd say offhand he's at least seventy. But allowing for a hard life and early deterioration, he could be in his fifties. We're just starting to run tests. And how old would you say Najjar is?"

Jania looked as though she'd bitten into something sour, but she wasn't giving an inch.

"I couldn't guess. I never asked him."

"Then get busy and ask him! I've got to have answers!"

"That involves numbers," she said. "It's too early for that."

"It's too late for everything else!" boomed Gosney. "You have a session with Najjar right now and you bring me his age and that of the other natives we see around. I want it down in black and white by this afternoon. And if he makes any trouble, you tell him his son won't get well without it!"

It was plain that Goz intended to use the club he now had to make Najjar cooperate, and I would have given much to be in on Jania's session with the chief. But I didn't have a chance. Even Luki was barred, for the linguist insisted on complete privacy while she tried to unravel the mystery or correct her error about the language.

I managed to find enough work to do in Gosney's lab so that I was still there later in the day when Jania brought in her report. It was on one sheet of paper with a short column of figures, and she plunked it down on Gosney's desk without any preamble.

"There you are," she said, "their ages—if it does you any good."

And she started to walk out of the room.

"Just a minute, Dr. Winters," said Goz, scowling at the paper. "This doesn't make sense. Two hundred and five—two hundred and ten—one hundred and ninety-five..."

"I didn't say it made sense. That's what I got."

"But this—well, yes, in that case I suppose the patient could be his son—only then... Are you sure, Dr. Winters, that he understood what a year is, even allowing for planetary differences?"

"We went into all that," she said coldly. "The year and the seasons and the numbers. These people aren't stupid. Never underestimate what primitive man can do."

"I never said they were stupid. But—are you sure you haven't mixed up the words for month and year?"

"Dr. Gosney!" cried Jania. "Perhaps I'm the one you think is stupid!"

"No, no! Nothing like that. But you see... Oh, very well. You may go."

Jania lost no time in doing so, and the doctor sat at his desk, staring at the paper she had given him. I made a slight movement, and he motioned me to come over to him.

"Take a look at this, Gil. See if it makes any sense to you.

I glanced down and read: Najjar, two hundred and ten years; Tabor, two

hundred and five; Fergus, one hundred and ninety-five.

"It does seem incredible," I said.

"Incredible!" boomed Goz, suddenly full of energy. "It's marvelous! There must be something about this planet. Something in this hemisphere, for they haven't reported anything like this on the continent. Something that makes for a longer life span—radiation, perhaps. As you know, all radiation is not negative in its effect. And not only that, these men are still young! Don't you see, Gil? We've got the secret of eternal youth right here under our noses!"

I saw all right, and my mind was racing to pick out the hows and whys. But Goz was there ahead of me.

"This ties right in with your thesis, Gil," he said. " 'Life Span Variations from a Selection of Stellar Systems: "

He looked at me pointedly as though asking if I got the idea. Of course I did, and felt annoyed at having my old paper thrown up at me in this manner.

"My thesis said nothing about man, if you remember."

"Man is an animal and he has a definite life span. An unfortunately short one, from our point of view."

"But I only considered the lower life forms," I protested. "Turtles and crustaceans and such X-Tees as I happened to get hold of. To apply those figures to man... And anyhow, we don't know the properties of this sun."

"You don't know them, but I have them. Don't you suppose they were all collected and analyzed before permission was given to colonize? And I took the trouble to get hold of that data when I first came here. Now I've got a little job for you, Dr. Abbott. Here are the figures for Thursday's sun; and here is your thesis, in case you've forgotten how you came to your results. You get busy and work out the possible life span for natives of Thursday Planet. If not for this alien species, man, then for something like the Toxic Toad. And the sooner you can have some figures for me, the better."

I took the papers he held out to me and retreated to my corner of the lab. I sat down in my little cubicle and looked at the published copy of my thesis. Printed there in the pages of *X-Tee Biology*, it seemed strange and foreign, as though written by somebody else. At another time, I would have felt proud to see it there, with my name beneath the title. But now I wondered how I had ever thought up all that stuff. And was there really anything to the theory after all? I had been in the field for so long and so

much had happened. I had dealt with so many practical problems and crises, that theory now seemed unimportant if not downright silly.

And yet this had won me the trip to Estrada. There must be some value to it. Dr. Gosney even believed it, or wanted to believe it. I transferred my attention to the sheaf of figures he had given me—the list of recorded elements and reactions of Thursday's sun. Little by little, as I checked through my article, the methods and equations I had used came back to me and I began to insert the proper figures from Gosney's list.

I was deeply immersed in the work when I became aware of someone watching me. I looked up to find Luki standing at the door.

"I don't want to interrupt," she said. "Just say good-by."

"Good-by?" I was only half-aware of what she was saying.

"Yes. Isn't it exciting? Goz thinks we're really onto something important. He's sending Jania and me back to the village to talk to the women—find out how old they are and all that. I understand you're doing important work here, too. And of course, he's got to try to help old Bejma, if only to please the chief."

"Yes, I'm sure he'll do all he can," I said. "When do you leave?"

"Right away. I just stopped by to tell you. The air-car's waiting."

With that she was gone, and I went back to my figures. At the same time, I felt vaguely worried about Luki. She and I had worked so long together. Would she be all right without me? Why did Goz send the two women off without a man along? Perhaps Witherspoon would stay with them. And then most of the population of the village was female, and Luki was a resourceful girl.

I wrenched my mind back from these worries and looked at the figures crawling across my paper. My equation for the Toxic Toad was beginning to work out. It should have a life span at least as long as the Sirius turtle. But did anybody know? Had anyone ever bothered to find out? Once again I heard Dr. Thursby's voice saying, "Not enough research. Not nearly enough basic research!"

How true, I thought. But what did it prove about man? Where was the connection between the toads and

Najjar? I still had not found any toads in this hemisphere. And even if all this were true about Thursday's sun, would it really affect an alien species like man? Even if they had lived on Thursday for a thousand years—which was

an outside guess for the primitives. And if so, what about the rest of us? Could we all look forward to an extended life span? Or possibly a longer life for our offspring?

There were altogether too many questions, none of which fitted into my equations as designed for simple life forms. I sat chewing my pencil and staring at the paper until Goz put his hand on my shoulder and bent over to see my results.

"You've been at this a long time," he said. "Got any answers? We have a small computer if you need it."

I pushed my figures over for him to see. "They come out remarkably like those in my thesis. But I still don't see that it proves anything for man. We didn't evolve here, after all. And I don't believe anybody gave a thought to the toad's life span."

"They'll do it now," he said, and his eyes grew excited as he read over my work. His old obsession had him by the throat, and I could see that he'd never let it go till he had milked the possibilities dry.

How many men, from the early explorers on Terra on through our penetration of the Galaxy, had pursued this will-o'-the-wisp? Probably I'd been some kind of a nut to choose this topic for my degree thesis. It had seemed the best available at the time and I had thought I was being entirely objective and scientific. Reluctantly, I brought my attention back to what Goz was saying.

"He's coming right down, of course."

"Who's coming?"

"Old Thursby, of course. Pay attention, Gil. We've got something big. And remember, you sparked it all with that paper."

"Unfortunately," I muttered, and added, "Did you tell him all this? What did he say?"

"Just what you're thinking now. That I've gone off on my crazy hobby. But he couldn't get around that two hundred and ten years for old Najjar. Oh, of course, he said there was the language. Everyone wants to put the blame on Jania and her translations, but I don't believe it. Well, Thursby's coming tonight. The colonel made him. At least, *he* sees that we've got something here."

I thought that the colonel was not a scientist, and the lay mind is apt to catch onto outside ideas and forget the tedious work required before anything is proved. But at least my boss was coming. He'd be able to sort things out, to keep a check on Gosney's enthusiasm. I was startled when Goz dragged me to my feet.

"Come along," he said. "You and I are going to have a session with Najjar."

"Najjar! What can he tell us? Ignorant—unscientific —and neither of us knows his language. Perhaps when Jania comes back..."

"Clever the way I got rid of the women!" Goz was gloating as he dragged me out of the lab toward the hospital hut.

"You got rid of them!"

"Of course. I don't believe they'll find any important information down there. But now you and I have a clear field with Najjar. Haven't you noticed how he gravitates toward men? You were the one he invited to his village. Luki just happened along. Now I'm the one that he follows around."

"But we're doctors. At least you are. And he wants his son cured."

Even as I said it, the anomaly struck me. His son or his father? You couldn't get around that mystery. And then I wondered if he would make such a fuss if the man was his father. After all, a father gets old naturally. He could be expected to suffer and die at his age—sad but unavoidable. But if he were his son! If men here had a life expectancy of two hundred years and older—then the chief might well be behaving as he was behaving! The possibility of the idea swamped me. I began to get excited, just as Goz was, and I followed him into the hospital hut, determined to help in any way I could.

Najjar was squatting on the floor just outside the partition which screened off the sick man's bed. He seemed to be in deep thought, but even in this relaxed position he managed to convey an impression of dignity and command.

Goz paused at the door for a moment and watched the chief.

"Remember that in primitive societies there is usually a big division between the men and the women," he whispered to me. "Each group has its duties and traditions with strong taboos to keep them separated. Perhaps it was a mistake to have this work entirely handled by women. We may do better even with the language barrier."

Then he walked confidently across the room.

"Well, and how does our patient seem today?"

Najjar rose slowly to his feet. "He sleeps now."

"Good," said Goz. "Our tests show nothing serious. He should respond to treatment soon. But I can't guarantee the future without more information. You will try to help, of course?"

Najjar was listening closely, bewildered by the many unfamiliar words. But he got the word, help.

"I help. How can I help?"

"You can answer questions. You can tell us things."

The doctor led the native to the other end of the hut where his desk and several chairs stood. When we were all seated, Goz behind the desk, he started in.

"Najjar—Jania, Dr. Winters, she tells me you say you are two hundred and ten years old. Right?"

Najjar nodded. "Right."

"And your friends. Tabor is almost as old. Fergus, too."

Najjar continued to nod solemnly. "That is right."

"And you know what a year is? The planet—the earth moves..."

Najjar interrupted to gesture. "The sun moves. From here around to here."

"Um, yes," said Goz. "But there is something we don't understand. We are all men. Yes? You and us? But we do not live for two hundred years. Maybe seventy. You understand? Seven tens. Maybe one hundred with good care and good luck."

Najjar drew himself up. Did he look scornful, disdainful, this man who was asking for his son to be cured?

He said simply, "You are not of the chosen."

Goz stared at him for a minute. "I guess you're right," he said. "How does one get to be chosen?"

He had left Najjar behind again with the language. I tried to help.

"Why, Najjar? Why?"

He looked at me for a long moment, and I could see that he was going over his small store of words in Basic to see which might explain this difference. Suddenly he spoke as though the word was forced out of him. "Tota!" he cried. "Tota!"

"It's their word for the Toxic Toads," I told Goz.

"So I gathered. But what's the connection? I think we're onto something. Maybe you can do better, Gil. You ask him."

Najjar seemed quite willing to explain. Slowly, with few words and many gestures, the picture began to emerge. When he was young there were many totas. Now they were all gone. Even on the island he had shown me.

"That's right. You were going to take me to the Island of Totas!"

"You not find," he told me. "All gone. All dead."

"But what happened to them?" I asked.

Najjar made the typical shrugging gesture that means, who knows? "They go through the hot waters. Very few come back. Now none come back any more."

"Interesting," said Goz. "But what's it got to do with his age? Get back to the chosen people."

So I tried questioning again with words of one syllable.

"Your people use totas? Need totas? How? Why?"

Then it came out. "All boys," said Najjar. "All young boys must have *tota test*."

"What's that?" I picked him up, while Goz listened in rapt amazement. "What's a *tota test*?"

"Every year young boys go to island. They live with totas. They play with totas. They fight with totas..."

"They get bitten by totas!" cried Goz.

Najjar smiled and spread his hands. "You know."

"But that's a death sentence!" I exclaimed, remembering all too vividly my experience on Estrada. "No antidote! You must have killed off hundreds!"

Najjar looked at me and I could feel his disdain. "Many die but some do not. Some are chosen to live. I lived!"

I stared at him in horror and disbelief. Perhaps because I had suffered and lived, thanks to the antidote, I had too clear a picture of what the youth of

Thursday Planet had suffered in their toad test. But Goz was far ahead of me. In fact, he was on his feet.

"So that's it! We've got it, Gil! We've got the secret of longevity—eternal youth—whatever you want to call it. It's a major breakthrough. And it follows your hypothesis. Don't you see, the properties of the star are right. The radiation works on the toads. And the toad venom passes on whatever it is to the bitten man, *provided he can survive*! You survived because of the antidote. But apparently some of these primitives have a built-in immunity. Perhaps it is even passed on through the genes, which would tend to make the 'chosen' men a hereditary class."

He stopped suddenly and looked at me with an odd expression, but at the time I was so overwhelmed by our discovery that I paid little attention. Then on an impulse he turned to Najjar.

"Women?" he asked. "Girls. They have tota test?"

A look of extreme horror spread over Najjar's face.

"No, no! No girls. No women chosen."

"Then that woman—your wife—at village? She is Bejma's mother?"

Najjar shook his head. "Bejma's mother dead long time. This wife is..." I could see him counting on his fingers. "This wife number seven. Chief must have wife. One die—get new one. Najjar have many wives in many years."

For a few minutes, I contemplated the social implications of all this, and my mind refused to accept it. Najjar did not seem inclined to comment further. He sat silent, saddened by knowing the death of his son was inevitable. And I was now convinced that Bejma was his son.

Goz was matter-of-fact. "Yes. I can believe that. This explains a lot. So the toads were rare here even in Bejma's day. He was not bitten and so he was not one of the chosen. And now he is old. Now he must die. Well, we do our best. You tell him that."

And as though it had all become too much for him, Goz turned and left the hut, and I went after him. I was still too confused and horrified to think clearly. Outside, Goz paused for a moment.

"It begins to make sense," he told me. "Probably all started as a youth ritual and character test. What the anthropologists call a rite of passage. Jania will be able to give us plenty of examples. The ones that survived naturally became the rulers: the chiefs and the wise men. Gil, what wouldn't I give if I could have two hundred good young years to work in! And of course, the

women were not involved. Any culture that killed off its women at that rate would not long survive. But the men! They were expendable as long as some of them lived to be almost immortal."

He stopped talking and stared at me and I stared back. It was all too much to take in at one sitting. My very controversial hypothesis—worked out when I was just a kid, how long ago?—was now developing into something so fantastic for all mankind that I hardly dared think of it.

"Come on," said Goz, jogging my elbow. "This is too good to hide under a barrel. Let's alert old Thursby before he leaves."

And he dragged me off to the communications shack.

## SERENDIPITY

As it turned out, Dr. Thursby did not come to the islands that night. He waited for a few days and came down with a group of visiting scientists. A science starship was in orbit, bringing the promised anthropologist to help Dr. Winters. Normally, it would have gone on immediately, taking its scientific passengers to their various destinations. But when news spread of Dr. Gosney's discovery, almost all of them wanted to come down and see for themselves. The ship's captain was persuaded to delay departure, and Dr. Thursby invited all who were interested to a conference at our island outpost.

Instead of the professor, Colonel Northcutt arrived that night, with military reinforcements. And for three days, Goz and I were so busy helping to prepare quarters for our unexpected guests, that we had little opportunity to discuss our remarkable discovery.

Goz seemed always to be hurrying between his patient in the hospital and the new prefabs that were being erected, and when he passed me on the run, he only said that he hoped I was working on my speech for the conference. I tried unsuccessfully to put this off on him, as senior scientist, for the thought of having to stand up before those eminent men and explain this unbelievable situation appalled me. But he said that considering my thesis, three-quarters of the work was mine and they would naturally want to hear from me.

However, when I tried to settle down in my cubicle and map out a speech, I was routed out by the colonel, who was always short of manpower.

"It's great to have brains!" he cried, slapping me on the back, "but right now we've got to get ready for these important visitors. No idea how many will come. Never had anything like this on Thursday before. Come on, my boy,

don't leave us in the lurch. You can figure out what you're going to say later."

Somehow, there didn't seem to be any later. We all worked till we were exhausted and then fell into bed. Still, there was something satisfying about hard labor. I was pleased to find I was as good at setting up prefabs as any of Colonel Northcutt's regular men.

I presumed that with the shortage of living quarters, Luki and Jania would be allowed to stay at the native village. So I was surprised when I heard Goz giving orders for Witherspoon to make a special trip to bring them back.

"I don't care if you've been missing out on sleep," he told the pilot. "What do you think we've been doing? Since you fly the Heat Barrier at night, you can fly down there in the daytime. Those women must be here for the conference."

Thus, three days later, when our prefabs were at last in place and Dr. Thursby arrived with his group of scientists, Luki and Jania were brought back from the island settlement. When the conference convened that night, they sat on the platform with the rest of the Thursday scientists. Our distinguished visitors occupied the front rows, with the military and other personnel seated behind them. Nobody wanted to miss hearing what went on at the conference.

Dr. Thursby, of course, chaired the meeting, with Luki and me on one side of him and Goz and Jania on the other. Almost under my nose were the two eminent, off-world doctors. Goz had introduced me earlier, and from his lowered voice I gathered that he held them in high esteem. They were two brothers called Hogan— Dr. Joseph and Dr. Lee. The first was a life-span specialist and the second a noted surgeon. The only way I could tell them apart was that one sported a beard and the other confined himself to a moustache. I felt a bit nervous under their concentrated stares. Who's going to believe all this, I asked myself? But presently Dr. Thursby opened the meeting and attention was centered on him. After a short outline of the history of the Toxic Toad and the peculiarities of Thursday Planet, he introduced Goz.

"Dr. Gosney has been urging us to explore the other half of our world, ever since he was assigned to our medical staff. But there were always too many other projects that had priority. Now it seems that perhaps he was right. We should have come down here long ago. So I will let him tell you about his unusual discoveries."

Goz started with the Thursday primitives, a remarkable enough tale in itself.

He soon had everyone's attention and I began to think that perhaps I would be spared the spotlight. But then he suddenly switched to me and my thesis.

"I had read this unusual paper in the pages of *X-Tee Biology*, and was delighted on my return to Thursday to find that the young man responsible for it was also coming here."

Again I felt attention swing back to me, and I was relieved when Goz went on with his speech, outlining my trip to Naj jar's village and the confusion over the sick man whom the native claimed as his son. It was not till he neared the end of his story that Dr. Gosney called on me.

"When I began to suspect that Najjar might really be as old as he claimed," he said, "I gave Dr. Abbott the radiation figures and other data for Thursday's sun. Then I asked Dr. Abbott to put them through his interesting equations. He did that, and—come on, Gil. It's your baby, really. Tell them what happened."

Luki pushed me to my feet and I found myself staring at all those top-echelon scientists—and being stared at. Any ideas I'd had about a fancy speech evaporated. But I knew I had to say something.

"They fitted," I said. "Much like the ones in those tables in the published article. But those were all for lower forms of life. I began to think the Toxic Toad must be a very long-lived animal. But how did man come into it? Especially since we didn't originate here. It didn't seem proved to me."

There was a murmur of assent from the front rows and a nodding of heads. Then Goz interrupted.

"That's what he kept saying to me. But still here were the figures, and there were the natives. You've all seen a few of them about the post. So then Dr. Abbott and I decided to have a session with Chief Najjar and try to get to the bottom of all this. Go on, Gil."

I scowled at him for passing the ball. I'd have much rather let him finish the story. But the audience was looking at me again and an undercurrent of applause broke out.

"So we talked to Najjar," I said. "And it seems that they have a kind of puberty ritual that must have gone on for generations. What you call a rite of passage— all the boys took part in it. They were taken to this Island of Toads where they all were bitten, and the few who survived returned and lived, as you see. How long? Did you by any chance learn how long they can be expected to live, Dr. Winters?"

But Jania was staring at me open-mouthed. "A rite of passage!" she breathed. "But they never told us. Probably a secret on the men's side."

The meeting got no further for the moment. Applause was breaking out all over, and the two Doctors Hogan climbed up on the platform and shook hands with me.

"Amazing!" cried Dr. Lee. "I must congratulate you all on a major breakthrough. We'll want to set up a laboratory here. I'll put through an order for funds. There's only the question on which side of the Barrier to locate."

"It's incredible!" exclaimed his brother. "We've been looking for something like this for years. A catalyst to reverse the aging process in the cell. Of course, we'll have to refine the agent. Don't want to kill off ninety percent of our patients!"

All the scientists milled around, talking, congratulating, planning. Luki and Jania and I were pushed to the side, and I could see that our own experts, Dr. Thursby and Goz, and even the colonel, were being relegated to the background.

Finally, there was a lull in the talk, and above it the voice of one of the Doctors Hogan:

"It's really a case of serendipity! They were trying to get rid of the toads, but instead they found the secret of continued youth!"

The applause that followed was cut short by a rap from the professor's gavel.

"I wonder if we can call it serendipity when we've lost what we found before we ever found it!"

There was an appalled silence.

"What do you mean, you've lost it?" demanded Dr. Joseph Hogan.

I turned toward Goz and saw the blank look on his face.

"No more toads," he said, short and sarcastic.

"Oh, but surely," began a dozen voices. "Have you looked... there must be—somewhere!"

"Ladies and gentlemen!" The professor rapped with his gavel. "When we set out to do a job, we do it. We were told to get rid of the toads, and we did. I've been checking for several weeks."

"That's why Najjar is so gloomy," said Gosney. "He knows."

"In fact," added Dr. Thursby, "even dead toads are likely to be collectors' items. We destroyed almost all of the carcasses. You see, they were rather, er, abhorrent to the population at large."

Then began a frantic combing of the planet for any possible toads still alive. The scientists from off-world, seeing this unprecedented discovery slipping through their fingers, were slow to admit the truth: the Toxic Toads of Thursday Planet were now extinct as a species. To the anguished cries of protest, Dr. Thursby could only mutter, "I always said we ought to do more basic research."

I was glad to be sent back to work on the southern continent, thus escaping the friction and confusion that had taken possession of our peaceful islands. All the visiting scientists were arguing to exhaustion. The Doctors Hogan insisted that they were going to set up a research institute, with or without toads. They promised the colonel that large funds could be obtained for this project, and had him flying them about the islands in one of the aircars to pick out the most suitable site for their center.

Luki went back to headquarters with the professor, where they worked long hours in their lab, going over their notes and the antidote material they still had. When I saw Goz at all, he had a haunted expression, and was being followed about by one group or another of the scientists, all arguing, objecting, or questioning.

"If they'd only listened to me in the beginning!" he lamented to all around him. "Before they sent me off on that useless vacation! Before they turned Thursby loose with his antitoad devices!"

For several days he had me explaining my notes and thesis to these people, but finally to my relief, he gave up on that.

"All this theory isn't getting us anywhere," he declared. "We have the facts. All we need are the animals to work with. You go find us some."

That was when I was packed off to the other side of the Heat Barrier and sent out in the field. I was even assigned a flitter for my own use, and spent weeks covering the cultivated lands and the wild. Whenever I arrived at one of the stations, I was met by happy, enthusiastic farmers and ranchers. Emma Mustard, Amish Bawcum, and others could not shower enough compliments upon me. To my hopeful questions about toads, they replied that Dr. Thursby and I were celebrated heroes. Our names would go down in history for the excellent job we had done of destroying the toads. Now everyone could get on with settling and developing the planet—which was

what they were all quite happily doing. I did not have the heart to tell them about the tantalizing possibility that had just eluded the grasp of men.

I returned to headquarters at last, tired and discouraged, to make my report to Colonel Northcutt and the professor. I had dumped my field gear onto the cot in the small dormitory room and was wearily considering how I might keep my words from sounding entirely hopeless. Perhaps I had missed some niche or corner where I might try again.

There was a knock, and Luki came in.

"I heard you were back," she said. "And I can see you've done no better than anyone else."

"I guess the Doctors Hogan and others are going to have to accept the inevitable," I said. "Probably man was never meant to live two hundred years."

"Don't imagine they're giving up," she said. "That's why I thought I ought to warn you."

"Warn me?" Even then I was quite dense about it. "Warn me of what?"

"If they can't have toads to experiment with, they'll use people. There are a few people, you know, who have this condition."

"But suppose the natives object? There are laws that protect the rights of primitive peoples."

"Just so. I believe they're objecting already. But then there's always you."

"Me! Why me?" But of course, I knew. I had simply been refusing to recognize the fact that I had been bitten by a Toxic Toad and survived. "I don't believe it!" I protested. "How can they be sure?"

"But just look at you! Have you any idea how different you are? No, I suppose you don't. Well, when I first met you, Gil, you were a rather poor specimen. Oh, I always knew you were a brain and also a nice kid. But physically—you dropped things, you fell over yourself. You were half your present size. I could go on all night. Just look at yourself in the glass and try to remember. Every day now I hear people say how great you're looking. If they only knew!"

I must have been staring at her with my mouth open, for she put her hand on my shoulder. "Don't take it so hard. Like Najjar and Fergus, you're a new breed. You've got a wonderful life ahead of you, Gil. I envy you. So does Goz."

"But a guinea pig! I won't be anybody's guinea pig!"

"That's why I'm warning you. I shouldn't, you know. Don't ever tell anyone. But Goz agrees. We think you have the right to decide."

My mind was in a whirl and yet I realized that I was not going off in all directions as I used to do in a crisis. I was considering every angle quite clearly and swiftly.

"Then I'd better get off-world fast. But can I? They'll say I've run out on them. What's it likely to mean anyhow? Testing, experiments?"

"Oh, they'll want blood donations and cell samples. They'll run tests on your nervous system and such. It probably won't hurt much, but you'll forfeit your liberty—and for quite some time, I imagine."

I could see that. My own career as a scientist would be finished. I'd never be allowed to leave Thursday Planet, unless it were to go on exhibit at some intergalactic conference. For how are you going to know if a guy has eternal youth unless you keep him around under observation? And what kind of a way is that to enjoy your blessing?

"I think I'd better get out," I said. "If I can."

Of course, Luki had thought of everything. Right then she was shoving a sheaf of tickets and papers under my nose.

"I had these made up, just in case. Oh, I do hope I did right, Gil."

When I heard the worry in her voice, I remembered that I'd be leaving all this. Dr. Thursby, Goz, Najjar, even Emma Mustard. And most important, Luki. If I had Luki, I wouldn't mind leaving the rest so much.

Suddenly I knew that I couldn't leave her. I reached out and pulled her close and kissed her.

"You did just fine except you got only one ticket. Now let's hurry. We're both getting off this world!"

But inexplicably, Luki pushed me away.

"No, Gil, no! I can't! Oh, it isn't that I don't like you. You know I'm crazy about you. But I can never marry you. You must see that."

"And why not? I offer you my hand, and brain, and any salary I happen to earn, and..."

"Go on," she said. "Don't skip the rest of it. "Your two hundred years of

eternal youth." Where do you think I'll be in two hundred years? In twenty years I'll be old beside you."

"Anything can happen in twenty years," I said.

"I know. I can guess a lot of it."

She had slipped from my arms, and I saw her mouth set in its stubborn line that meant she had made up her mind. And I remembered the old woman Najjar had introduced as his wife and his careless reference to the many who had preceded her. Could I possibly get to thinking that way about women? About Luki?

"You'd better hurry," she said. "There's a freighter at the spaceport. The one we came on. You'll know the crew. They blast within the hour."

Then she was gone. I picked up the tickets and clearance papers from where I'd dropped them. Luki was right, of course. I'd have to hurry. Perhaps I could return for her when the furor was over. I crammed a few things into a bag and left my unfinished report on the desk where it could be found.

I might have preferred a crew that I had never met before. But perhaps the fact that the captain, and also Dr. Hornby, remembered me made it easier to get aboard without questioning. As it was, they were in a hurry to blast and hardly glanced at my papers.

"You are looking better," said Dr. Hornby. "Yes, I remember you... Hardly recognize you now! But never mind. Get aboard and we'll straighten things out when we've left orbit."

Later he assigned me a cabin. A much larger and more comfortable one than on my first voyage. There were few people traveling with us and the good cabins were empty.

"Perhaps you can explain to me," he said, as he helped me stow my gear, "why everyone is coming to Thursday these days, and nobody is going away. Used to be just the other way around—everyone trying to sneak off-world. Had to watch out for stowaways. But not any more. We've been bringing people here every trip, and they all stay."

"Well, you see, there was a problem," I told him. "And we managed to solve it for them."

"Oh, yes. Those toads. Heard you'd done a good job there. Congratulations. Now if you'd like to spend some of the trip in suspension, we've got an interesting collection of dream tapes." He paused as he saw my expression. "Oh, that's right. You did have a bad experience with a tape, didn't you? Well, we've plenty of food and air this trip and not many to share it with. So you're welcome to stay up with us. But I warn you. It's a long trip and a terrible waste of time."

"That's all right," I replied. "I've a feeling that I've got all the time in the universe."

# ABOUT THE AUTHOR

A. M. Lightner is a naturalist by avocation. She has received plaudits for her humorous writing and for the skill with which she is able to weave her science background in entomology into her narrative. In the THURSDAY TOADS, she tells of future dangers and discoveries in a science fiction mystery involving the secret of extended youth.

A. M. Lightner was born in Detroit, Michigan. Her childhood and adolescence were spent in that city and in Tryon, North Carolina, where her parents had a winter home. She was educated at Westover School and at Vassar college and after graduation moved to New York. She lives there still with her husband who is an artist. Their son is an artist, also. Whether their two young grandchildren will be writers, or artists, or both, is another tale the future has to tell.

Among her many successful science fiction books are, THE ROCK OF THREE PLANETS, THE SPACE ARK, DOCTOR TO THE GALACY, THE SPACE PLAGUE, AND THE DAY OF THE DRONES.