



Next is a farm story, if you likebut this is no ordinary farm. Under the bucolic surface of this tale of another planet, with its consistent and beautifully worked out details, there is a tricky problem, about which I will give you one or two hints; Ecology is something human beings can adapt to suit their own purposes; right? But human beings in an environment are part of its ecology . . .

**Or:** if an experimental animal alters its responses in order to get food from the experimenterwho is conditioning whom?

## **BALANCED ECOLOGY**

## James H. Schmitz

The diamondwood tree farm was restless this morning, llf Cholm had been aware of it for about an hour but had said nothing to Auris, thinking he might be getting a summer fever or a stomach upset and imagining things and that Auris would decide they should go back to the house so llf's grandmother could dose him. But the feeling continued to grow, and by now llf knew it was the farm.

Outwardly, everyone in the forest appeared to be going about their usual business. There had been a rainfall earlier in the day; and the tumbleweeds had uprooted themselves and were moving about in the bushes, lapping water off the leaves. Ilf had noticed a small one rolling straight towards a waiting slurp and stopped for a moment to watch the slurp catch it. The slurp was of average size, which gave it a tongue-reach of between twelve and fourteen feet, and the tumbleweed was already within range.

The tongue shot out suddenly, a thin, yellow flash. Its tip flicked twice around the tumbleweed, jerked it off the ground and back to the feed opening in the imitation tree stump within which the rest of the slurp was concealed. The tumbleweed said "Oof!" in the surprised way they always did when something caught them, and went in through the opening. After a moment, the slurp's tongue tip appeared in the opening again and waved gently around, ready for somebody else of the right size to come within reach.

llf, just turned eleven and rather small for his age, was the





right size for this slurp, though barely. But, being a human boy, he was in no danger. The slurps of the diamondwood farms on Wrake didn't attack humans. For a moment, he was tempted to tease the creature into a brief fencing match. If he picked up a stick and banged on the stump with it a few times, the slurp would become annoyed and dart its tongue out and try to knock the stick from his hand.

But it wasn't the day for entertainment of that kind. Ilf couldn't shake off his crawly, uncomfortable feeling, and while he had been standing there, Auris and Sam had moved a couple of hundred feet farther uphill, in the direction of the Queen Grove, and home. He turned and sprinted after them, caught up with them as they came out into one of the stretches of grassland which lay between the individual groves of diamondwood trees.

Auris, who was two years, two months, and two days older than llf, stood on top of Sam's semiglobular shell, looking off to the right towards the valley where the diamondwood factory was. Most of the world of Wrake was on the hot side, either rather dry or rather steamy; but this was cool mountain country. Far to the south, below the valley and the foothills behind it, lay the continental plain, shimmering like a flat, green-brown sea. To the north and east were higher plateaus, above the level where the diamondwood liked to grow. Ilf ran past Sam's steadily moving bulk to the point where the forward rim of the shell made a flat upward curve, close enough to the ground so he could reach it.

Sam rolled a somber brown eye back for an instant as llf caught the shell and swung up on it, but his huge beaked head didn't turn. He was a mossback, Wrake's version of the turtle pattern, and except for the full-grown trees and perhaps some members of the clean-up squad, the biggest thing on the farm. His corrugated shell was overgrown with a plant which had the appearance of long green fur; and occasionally when Sam fed, he would extend and use a pair of heavy arms with three-fingered hands, normally held folded up against the lower rim of the shell.

Auris had paid no attention to llf's arrival. She still seemed to be watching the factory in the valley. She and llf were cousins but didn't resemble each other, llf was small and wiry, with





tight-curled red hair. Auris was slim and blond, and stood a good head taller than he did. He thought she looked as if-she owned everything she could see from the top of Sam's shell; and she did, as a matter of fact, own a good deal of itnine tenths of the diamondwood farm and nine tenths of the factory, llf owned the remaining tenth of both.

He scrambled up the shell, grabbing the moss-fur to haul himself along, until he stood beside her. Sam, awkward as he looked when walking, was moving at a good ten miles an hour, clearly headed for the Queen Grove, llf didn't know whether it was Sam or Auris who bad decided to go back to the house. Whichever it had been, he could feel the purpose of going there.

"They're nervous about something," he told Auris, meaning the whole farm. "Think there's a big storm coming?"

"Doesn't look like a storm," Auris said.

llf glanced about the sky, agreed silently. "Earthquake, maybe?"

Auris shook her head. "It doesn't feel like earthquake." She hadn't turned her gaze from the factory, llf asked, "Something going on down there?"

Auris shrugged. "They're cutting a lot today," she said. "They got in a limit order."

Sam swayed on into the next grove while llf considered the information. Limit orders were fairly unusual; but it hardly explained the general uneasiness. He sighed, sat down, crossed his legs, and looked about. This was a grove of young trees, fifteen years and lisss. There was plenty of open space left between them. Ahead, a huge tumbleweed was dying, making happy, chuckling sounds as it pitched its scarlet seed pellets far out from its slowly unfolding leaves. The pellets rolled hurriedly farther away from the old weed as soon as they touched the ground. In a twelve-foot circle about their parent, the earth was being disturbed, churned, shifted steadily about. The clean-up squad had arrived to dispose of the dying tumbleweed; as Hf looked, it suddenly settled six or seven inches deeper into the softened dirt. The pellets were hurrying to get beyond the reach of the clean-up squad so they wouldn't get hauled down, too. But half-grown tumbleweeds, speckled yellow-green and ready to start their rooted period, were rolling





through the grove towards the disturbed area. "They would wait around the edge of the circle until the clean-up squad finished, then move in and put down their roots. The ground where the squad had worked recently was always richer than any other spot in the forest.

Bf wondered, as he had many times before, what the cleanup squad looked like. Nobody ever caught so much as a glimpse of them. Riquol Cholm, his grandfather, had told him of attempts made by scientists to catch a member of the squad with digging machines. Even the smallest ones could dig much faster than the machines could dig after them, so the scientists always gave up finally and went away.

"Ilf, come in for lunch!" called llf's grandmother's voice. llf filled his lungs, shouted, "Coming, Grand" He broke off, looked up at Auris. She was smirking. "Caught me again," llf admitted. "Dumb humbugs!" He yelled, "Come out. Lying Lou! I know who it was."

Meldy Cholm laughed her low, sweet laugh, a silverbell called, the giant greenweb of the Queen Grove sounded its deep harp note, more or less all together. Then Lying Lou and Gabby darted into sight, leaped up on the mossback's hump. The humbugs were small, brown, bobtailed animals, built with spider leanness and very quick. They had round skulls, monkey faces, and the pointed teeth of animals who lived by catching and killing other animals. Gabby sat down beside llf, inflating and deflating his voice pouch, while Lou burst into a series of rattling, clicking, spitting sounds.

"They've been down at the factory?" llf asked.

"Yes," Auris said. "Hush now. I'm listening."

Lou was jabbering along at the rate at which the humbugs chattered among themselves, but this sounded like, and was, a recording of human voices played back at high speed. When Auris wanted to know what people somewhere were talking about, she sent the humbugs off to listen. They remembered everything they heard, came back and repeated it to her at their own speed, which saved time. Ilf, if he tried hard, could understand scraps of it. Auris understood it all. She was hearing now what the people at the factory had been saying during the morning.

Gabby inflated his voice pouch part way, remarked in





Grandfather Riquol's strong, rich voice, "My, my! We're not being quite on our best behavior today, are we, llf?"

"Shut up," said llf.

"Hush now," Gabby said in Auris' voice. "I'm listening." He added in llf's voice, sounding crestfallen, "Caught me again!" then chuckled nastily.

Ilf made a fist of his left hand and swung fast. Gabby became a momentary brown blur, and was sitting again on llf's other side. He looked at llf with round, innocent eyes, said in a solemn tone, "We must pay more attention to details, men. Mistakes can be expensive!"

He'd probably picked that up at the factory, llf ignored him. Trying to hit a humbug was a waste of effort. So was talking back to them. He shifted his attention to catching what Lou was saying; but Lou had finished up at that moment. She and Gabby took off instantly in a leap from Sam's back and were gone in the bushes, llf thought they were a little jittery and erratic in their motions today, as if they, too, were keyed up even more than usual. Auris walked down to the front lip of the shell and sat on it, dangling her legs. llf joined her there.

"What were they talking about at the factory?" he asked.

"They did get in a limit order yesterday," Auris said. "And another one this morning. They're not taking any more orders until they've filled those two."

"That's good, isn't it?" llf asked.

"I guess so."

After a moment, llf asked, "Is that what *they're* worrying about?"

"I don't know," Auris said. But she frowned.

Sam came lumbering up to another stretch of open ground, stopped while he was still well back among the trees. Auris slipped down from the shell, said, "Come on but don't let them see you," and moved ahead through the trees until she could look into the open. Ilf followed her as quietly as he could.

"What's the matter?" he inquired. A hundred and fifty yards away, on the other side of the open area, lowered the Queen Grove, its tops dancing gently like armies of slender green spears against the blue sky. The house wasn't visible from here; it was a big one-story bungalow built around the trunks of a number of trees deep within the grove. Ahead of them lay the





road which came up from the valley and wound on through the mountains to the west.

Auris said, "An aircar came down here a while ago . . . There it is!"

They looked at the aircar parked at the side of the road on their left, a little distance away. Opposite the car was an opening in the Queen Grove where a path led to the house, llf couldn't see anything very interesting about the car. It was neither new nor old, looked like any ordinary aircar. The man sitting inside it was nobody they knew.

"Somebody's here on a visit," llf said.

"Yes," Auris said. "Uncle Kugus has come back."

llf had to reflect an instant to remember who Uncle Kugus was. Then it came to his mind in a flash. It had been some while ago, a year or so. Uncle Kugus was a big, handsome man with thick, black eyebrows, who always smiled. He wasn't llfs uncle but Auris'; but he'd had presents for both of them when he arrived. He had told llf a great many jokes. He and Grandfather Riquol had argued on one occasion for almost two hours about something or other; llf couldn't remember now what it had been. Uncle Kugus had come and gone in a tiny, beautiful, bright yellow aircar, had taken llf for a couple of rides in it, and told him about winning races with it. llf hadn't had too bad an impression of him.

"That isn't him," he said, "and that isn't his car."

"I know. He's in the house," Auris said. "He's got a couple of people with him. They're talking with Riquol and Meldy."

A sound rose slowly from the Queen Grove as she spoke, deep and resonant, like the stroke of a big, old clock or the hum of a harp. The man in the aircar turned his head towards the grove to listen. The sound was repeated twice. It came from the giant greenweb at the far end of the grove and could be heard all over the farm, even, faintly, down in the valley wifen the wind was favorable, llf said, "Lying Lou and Gabby were up here?"

"Yes. They went down to the factory first, then up to the house."

"What are they talking about in the house?" llf inquired.

"Oh, a lot of things." Auris frowned again. "We'll go and find out, but we won't let them see us right away."





Something stirred beside llf. He looked down and saw Lying Lou and Gabby had joined them again. The humbugs peered for a moment at the man in the aircar, then flicked out into the open, on across the road, and into the Queen Grove; like small, flying shadows, almost impossible to keep in sight. The man in the aircar looked about in a puzzled way, apparently uncertain whether he'd seen something move or not.

"Come on," Auris said.

Hf followed her back to Sam. Sam lifted his head and extended his neck. Auris swung herself upon the edge of the undershell beside the neck, crept on hands and knees into the hollow between the upper and lower shells, llf climbed in after her. The shell-cave was a familiar place. He'd scuttled in there many times when they'd been caught outdoors in one of the violent electric storms which came down through the mountains from the north or when the ground began to shudder in an earthquake's first rumbling. With the massive curved shell about him and the equally massive flat shell below, the angle formed by the cool, leathery wall which was the side of Sam's neck and the front of his shoulder seemed like the safest place in the world to be on such occasions.

The undershell tilted and swayed beneath llf now as the mossback started forward. He squirmed around and looked out through the opening between the shells. They moved out of the grove, headed towards the road at Sam's steady walking pace. Jif couldn't see the aircar and wondered why Auris didn't want the man in the car to see them. He wriggled uncomfortably. It was a strange, uneasy-making morning in every way.

They crossed the road, went swishing through high grass with Sam's ponderous side-to-side sway like a big ship sailing over dry land, and came to the Queen Grove. Sam moved on into the green-tinted shade under the Queen Trees. The air grew cooler. Presently he turned to the right, and llf saw a flash of blue ahead. That was the great thicket of flower bushes, in the center of which was Sam's sleeping pit.

Sam pushed through the thicket, stopped when he reached the open space in the center to let llf and Auris climb out of the shell-cave. Sam then lowered his forelegs, one after the other, into the pit, which was lined so solidly with tree roots that almost no earth showed between them, shaped like a mold to fit





the lower half of his body; he tilted forward, drawing neck and head back under his shell, slid slowly into the pit, straightened out, and settled down. The edge of his upper shell was now level with the edge of the pit, and what still could be seen of him looked simply like a big, moss-grown boulder. If nobody came to disturb him, he might stay there unmoving the rest of the year. There were mossbacks in other groves of the farm which had never come out of their sleeping pits or given any indication ,of being awake since llf could remember. They lived an enormous length of time and a nap of half a dozen years apparently meant nothing to them.

llf looked questioningly at Auris. She said, "We'll go up to the house and listen to what Uncle Kugus is talking about."

They turned into a path which led from Sam's place to the house. It had been made by six generations of human children, all of whom had used Sam for transportation about the diamondwood farm. He was half again as big as any other mossback around and the only one whose sleeping pit was in the Queen Grove. Everything about the Queen Grove was special, from the trees themselves, which were never cut and twice as thick and almost twice as tall as the trees of other groves, to Sam and his blue flower thicket, the huge stump of the Grandfather Slurp not far away, and the giant greenweb at the other end of the grove. It was quieter here; there were fewer of the other animals. The Queen Grove, from what Riquol Cholm had told llf, was the point from which the whole diamondwood forest had started a long time ago.

Auris said, "We'll go around and come in from the back. They don't have to know right away that we're here . . ."

"Mr. Terokaw," said Riquol Cholm, "I'm sorry Kugus Ovin persuaded you and Mr. Bliman to accompany him to Wrake on this business. You've simply wasted your time. Kugus should have known better. I've discussed the situation quite thoroughly with him on other occasions."

"I'm afraid I don't follow you, Mr. Cholm," Mr. Terokaw said stiffly. "I'm making you a businesslike proposition in regard to this farm of diamondwood treesa proposition which will be very much to your advantage as well as to that of the children whose property the Diamondwood is. Certainly you should at least be willing to listen to my terms!"





Riquol shook his head. It was clear that he was angry with Kugus but attempting to control his anger.

"Your terms, whatever they may be, are not a factor in this," he said. "The maintenance of a diamondwood forest is not entirely a business proposition. Let me explain that to youas Kugus should have done.

"No doubt you're aware that there are less than forty such forests on the world of Wrake and that attempts to grow the trees elsewhere have been uniformly unsuccessful. That and the unique beauty of diamondwood products, which has never been duplicated by artificial means, is, of course, the reason that such products command a price which compares with that of precious stones and similar items."

Mr. Terokaw regarded Riquol with a bleak blue eye, nodded briefly. "Please continue, Mr. Cholm."

"A diamondwood forest," said Riquol, "is a great deal more than an assemblage of trees. The trees are a basic factor, but still only a factor, of a closely integrated, balanced natural ecology. The manner of interdependence of the plants and animals that make up a diamondwood forest is not clear in all details, but the interdependence is a very pronounced one. None of the involved species seem able to survive in any other environment. On the other hand, plants and animals not naturally a part of this ecology will not thrive if brought into it. They move out or vanish quickly. Human beings appear to be the only exception to that rule."

"Very interesting," Mr. Terokaw said dryly.

"It is," said Riquol. "It is a very interesting natural situation and many people, including Mrs. Cholm and myself, feel it should be preserved. The studied, limited cutting practiced on the diamondwood farms at present acts towards its preservation. That degree of harvesting actually is beneficial to the forests, keeps them moving through an optimum cycle of growth and maturity. They are flourishing under the hand of man to an extent which was not usually attained in their natural, untouched state. The people who are at present responsible for themthe farm owners and their associateshave been working for some time to have all diamondwood forests turned into Federation preserves, with the right to harvest them retained by the present owners and their heirs under the same





carefully supervised conditions. When Aims and Ilf come of age and can sign an agreement to that effect, the farms will in fact become Federation preserves. All other steps to that end have been taken by now.

"That, Mr. Terokaw, is why we're not interested in your business proposition. You'll discover, if you wish to sound them out on it, that the other diamondwood farmers are not interested in it either. We are all of one mind in that matter. If we weren't, we would long since have accepted propositions essentially similar to yours."

There was silence for a moment. Then Kugus Ovin said pleasantly, "I know you're annoyed with me, Riquol, but I'm thinking of Auris and Ilf in this. Perhaps in your concern for the preservation of a natural phenomenon, you aren't sufficiently considering their interests."

Riquol looked at him, said, "When Auris reaches maturity, she'll be an extremely wealthy young woman, even if this farm never sells another cubic foot of diamondwood from this day on. Ilf would be sufficiently well-to-do to make it unnecessary for him ever to work a stroke in his lifethough I doubt very much he would make such a choice."

Kugus smiled. "There are degrees even to the state of being extremely wealthy," he remarked. "What my niece can expect to gain in her lifetime from this careful harvesting you talk about can't begin to compare with what she would get at one stroke through Mr. Terokaw's offer. The same, of course, holds true of llf."

"Quite right," Mr. Terokaw said heavily. "I'm generous in my business dealings, Mr. Cholm. I have a reputation for it. And I can afford to be generous because I profit well from my investments. Let me bring another point to your attention. Interest in diamondwood products throughout the Federation waxes and wanes, as you must be aware. It rises and falls. There are fashions and fads. At present, we are approaching the crest *ot* a new wave of interest in these products. This interest can be properly stimulated and exploited, but in any event we must expect it will have passed its peak in another few months. The next interest peak might develop six years from now, or twelve years from now. Or it might never develop since there are very few natural products which cannot





eventually be duplicated and usually surpassed by artificial methods, and there is no good reason to assume that diamondwood will remain an exception indefinitely.

"We should be prepared, therefore, to make the fullest use of this bonanza while it lasts. I am prepared to do just that, Mr. Cholm. A cargo ship full of cutting equipment is at present stationed a few hours' flight from Wrake. This machinery can be landed and in operation here within a day after the contract I am offering you is signed. Within a week, the forest can be leveled. We shall make no use of your factory here, which would be entirely inadequate for my purpose. The diamond-wood will be shipped at express speeds to another world where I have adequate processing facilities set up. And we can hit the Federation's main markets with the finished products the following month."

Riquol Cholm said, icily polite now, "And what would be the reason for all that haste, Mr. Terokaw?"

Mr. Terokaw looked surprised. "To insure that we have no competition, Mr. Cholm. What else? When the other diamondwood farmers here discover what has happened, they may be tempted to follow our example. But we'll be so far ahead of them that the diamondwood boom will be almost entirely to our exclusive advantage. We have taken every precaution to see to that. Mr. Bliman, Mr. Ovin, and I arrived here in the utmost secrecy today. No one so much as suspects that we are on Wrake, much less what our purpose is. I make no mistakes in such matters, Mr. Cholm!"

He broke off and looked around as Meldy Cholm said in a troubled voice, "Come in, children. Sit down over there. We're discussing a matter which concerns you."

"Hello, Auris!" Kugus said heartily. "Hello, llf! Remember old Uncle Kugus?"

"Yes," llf said. He sat down on the bench by the wall beside Auris, feeling scared.

"Auris," Riquol Cholm said, "did you happen to overhear anything of what was being said before you came into the room?"

Auris nodded. "Yes." She glanced at Mr. Terokaw, looked at Riquol again. "He wants to cut down the forest."

"It's your forest and llf's, you know. Do you want him to do





it?"

"Mr. Cholm, please!" Mr. Terokaw protested. "We must approach this properly. Kugus, show Mr. Cholm what I'm offering."

Riquol took the document Kugus held out to him, looked over it. After a moment, he gave it back to Kugus. "Auris," he said, "Mr. Terokaw, as he's indicated, is offering you more money than you would ever be able to spend in your life for the right to cut down your share of the forest. Now . . . do you want him to do it?"

"No," Auris said.

Riquol glanced at llf, who shook his head. Riquol turned back to Mr. Terokaw.

"Well, Mr. Terokaw," he said, "there's your answer. My wife and I don't want you to do it, and Auris and Ilf don't want you to do it. Now . . ."

"Oh, come now, Riquol!" Kugus said, smiling. "No one can expect either Auris or llf to really understand what's involved here. When they come of age"

"When they come of age," Riquol said, "they'll again have the opportunity to decide what they wish to do." He made a gesture of distaste. "Gentlemen, let's conclude this discussion. Mr. Terokaw, we thank you for your offer, but it's been rejected."

Mr. Terokaw frowned, pursed his lips.

"Well, not so fast, Mr. Cholm," he said. "As I told you, I make no mistakes in business matters. You suggested a few minutes ago that I might contact the other diamondwood farmers on the planet on the subject but predicted that I would have no better luck with 'them."

"So I did," Riquol agreed. He looked puzzled.

"As a matter of fact," Mr. Terokaw went on, "I already have contacted a number of these people. Not in person, you understand, since I did not want to tip off certain possible competitors that I was interested in diamondwood at present. The offer was rejected, as you indicated it would be. In fact, I learned that the owners of the Wrake diamondwood farms are so involved in legally binding agreements with one another that it would be very difficult for them to accept such an offer even if they wished to do it."





Riquol nodded, smiled briefly. "We realized that the temptation to sell out to commercial interests who would not be willing to act in accordance with our accepted policies could be made very strong," he said. "So we've made it as nearly impossible as we could for any of us to yield to temptation."

"Well," Mr. Terokaw continued, "I am not a man who is easily put off. I ascertained that you and Mrs. Cholm are also bound by such an agreement to the other diamondwood owners of Wrake not to be the first to sell either the farm or its cutting rights to outside interests, or to exceed the established limits of cutting. But you are not the owners of this farm. These two children own it between them."

Riquol frownerf. "What difference does that make?" he demanded, "llf is our grandson. Auris is related to us and our adopted daughter."

Mr. Terokaw rubbed his chin.

"Mr. Bliman," he said, "please explain to these people what the legal situation is."

Mr. Bliman cleared his throat. He was a tall, thin man with fierce dark eyes, like a bird of prey. "Mr. and Mrs. Cholm," he began, "I work for the Federation Government and am a specialist in adoptive procedures. I will make this short. Some months ago, Mr. Kugus Ovin filed the necessary papers to adopt his niece, Auris Luteel, citizen of Wrake. I conducted the investigation which is standard in such cases and can assure you that no official record exists that you have at any time gone through the steps of adopting Auris."

"What?" Riquol came half to his feet. Then he froze in position for a moment, settled slowly back in his chair. "What is this? Just what kind of trick are you trying to play?" he said. His face had gone white.

Bf had lost sight of Mr. Terokaw for a few seconds, because Uncle Kugus had suddenly moved over in front of the bench on which he and Auris were sitting. But now he saw him again and he had a jolt of fright. There was a large blue and silver gun in Mr. Terokaw's hand, and the muzzle of it was pointed very steadily at Riquol Cholm.

"Mr. Cholm," Mr. Terokaw said, "before Mr. Bliman concludes his explanation, allow me to caution you! I do not wish to kill you. This gun, in fact, is not designed to kill. But if I





pull the trigger, you will be in excruciating pain for some minutes. You are an elderly man and it is possible that you would not survive the experience. This would not inconvenience us very seriously. Therefore, stay seated and give up any thoughts of summoning help . . . Kugus, watch the children. Mr. Bliman, let me speak to Mr. Het before you resume."

He put his left hand up to his face, and llf saw he was wearing a wrist-talker. "Het," Mr. Terokaw said to the talker without taking his eyes off Riquol Cholm, "you are aware, I believe, that the children are with us in the house?"

The wrist-talker made murmuring sounds for a few seconds, then stopped.

"Yes," Mr. Terokaw said. "There should be no problem about it. But let me know if you see somebody approaching the area . . ." He put his hand back down on the table. "Mr. Bliman, please continue."

Mr. Bliman cleared his throat again.

"Mr. Kugus Ovin," he said, "is now officially recorded as the parent by adoption of his niece, Aims Luteel. Since Auris has not yet reached the age where her formal consent to this action would be required, the matter is settled."

"Meaning," Mr. Terokaw added, "that Kugus can act for Auris in such affairs as selling the cutting rights on this tree farm. Mr. Cholm, if you are thinking of taking legali action against us, forget it. You may have had certain papers purporting to show that the girl was your adopted child filed away in the deposit vault of a bank. If so, those papers have been destroyed. With enough money, many things become possible. Neither you nor Mrs. Cholm nor the two children will do or say anything that might cause trouble to me. Since you have made no rash moves, Mr. Bliman will now use an instrument to put you and Mrs. Cholm painlessly to sleep for the few hours required to get you off this planet. Later, if you should be questioned in connection with this situation, you will say about it only what certain psychological experts will have impressed on you to say, and within a few months, nobody will be taking any further interest whatever in what is happening here today.

"Please do not think that I am a cruel man. I am not. I merely take what steps are required to carry out my purpose. Mr.





Bliman, please proceed!"

Ilf felt a quiver of terror. Uncle Kugus was holding his wrist with one hand and Auris' wrist with the other, smiling reassuringly down at them. Ilf darted a glance over to Auris' face. She looked as white as his grandparents but she was making no attempt to squirm away from Kugus, so Ilf stayed quiet, too. Mr. Bliman stood up, looking more like a fierce bird of prey than ever, and stalked over to Riquol Cholm, holding something in his hand that looked unpleasantly like another gun. Ilf shut his eyes. There was a moment of silence, then Mr. Terokaw said, "Catch him before he falls out of the chair. Mrs. Cholm, if you will just settle back comfortably . . ."

There was another moment of silence. Then, from beside him, llf heard Auris speak.

It wasn't regular speech but a quick burst of thin, rattling gabble, like human speech speeded up twenty times or so. It ended almost immediately.

"What's that? What's that?" Mr. Terokaw said, surprised. Ilf's eyes flew open as something came in through the window with a whistling shriek. The two humbugs were in the room, brown blurs flicking here and there, screeching like demons. Mr. Terokaw exclaimed something in a loud voice and jumped up from the chair, his gun swinging this way and that. Something scuttled up Mr. Bliman's back like a big spider, and he yelled and spun away from Meldy Cholm lying slumped back in her chair. Something ran up Uncle Kugus' back. He yelled, letting go of llf and Auris, and pulled out a gun of his own. "Wide aperture!" roared Mr. Terokaw, whose gun was making loud, thumping noises. A brown shadow swirled suddenly about his knees. Uncle Kugus cursed, took aim at the shadow, and fired.

"Come," whispered Auris, grabbing llf's arm. They sprang up from the bench and darted out the door behind Uncle Kugus' broad back.

"Het!" Mr. Terokaw's voice came bellowing down the hall behind them. "Up in the air and look out for those children! They're trying to get away. If you see them start to cross the road, knock 'em out. Kugusafter them! They may try to hide in the house."

Then he yowled angrily, and his gun began making the





thumping noises again. The humbugs were too small to harm people, but their sharp little teeth could hurt and they seemed to be using them now.

"In here," Auris whispered, opening a door. Ilf ducked into the room with her, and she closed the door softly behind them. Ilf looked at her, his heart pounding wildly.

Auris nodded at the barred window. "Through there! Run and hide in the grove. 111 be right behind you . . ."

"Auris! Ilf!" Uncle Kugus called in the hall. "Wait-don't be afraid. Where are you?" His voice still seemed to be smiling, Ilf heard his footsteps hurrying along the hall as he squirmed quickly sideways between two of the thick wooden bars over the window, dropped to the ground. He turned, darted off towards the nearest bushes. He heard Auris gabble something to the humbugs again, high and shrill, looked back as he reached the bushes, and saw her already outside, running towards the shrubbery on his right. There was a shout from the window. Uncle Kugus was peering out from behind the bars, pointing a gun at Auris. He fired. Auris swerved to the side, was gone among the shrubs, Ilf didn't think she had been hit.

"They're outside!" Uncle Kugus yelled. He was too big to get through the bars himself.

Mr. Terokaw and Mr. Bliman were also shouting within the house. Uncle Kugus turned around, disappeared from the window.

"Aurisi" llf called, his voice shaking with fright.

"Run and hide, llf!" Auris seemed to be on the far side of the shrubbery, deeper in the Queen Grove.

Ilf hesitated, started running along the path that led to Sam's sleeping pit, glancing up at the open patches of sky among the treetops. He didn't see the aircar with the man Het in it. Het would be circling around the Queen Grove now, waiting for the other men to chase them into sight so he could knock them out with something. But they could hide inside Sam's shell and Sam would get them across the road. "Auris, where are you?" Ilf cried.

Her voice came low and clear from behind him. "Run and hide, llf!"

llf looked back. Auris wasn't there but the two humbugs were loping up the path a dozen feet away. They darted past llf





without stopping, disappeared around the turn ahead. He could hear the three men yelling for him and Auris to come back. They were outside, looking around for them now, and they seemed to be coming closer.

llf ran on, reached Sam's sleeping place. Sam lay there unmoving, like a great mossy boulder filling the pit. llf picked up a stone and pounded on the front part of the shell.

"Wake up!" he said desperately. "Sam, wake up!"

Sam didn't stir. And the men were getting closer, llf looked this way and that, trying to decide what to do.

"Don't let them see you," Auris called suddenly.

"That was the girl over there," Mr. Terokaw's voice shouted. "Go after her, Bliman!"

"Auris, watch out!" llf screamed, terrified.

"Aha! And here's the boy, Kugus. This way! Het," Mr. Terokaw yelled triumphantly, "come down and help us catch them! We've got them spotted . . ."

Ilf dropped to hands and knees, crawled away quickly under the branches of the blue flower thicket, and waited, crouched low. He heard Mr. Terokaw crashing through the bushes towards him and Mr. Bliman braying, "Hurry up, Het! Hurry up!" Then he heard something else. It was the sound the giant greenweb sometimes made to trick a flock of silverbells into fluttering straight towards it, a deep drone which suddenly seemed to be pouring down from the trees and rising up from the ground.

Ilf shook his head dizzily. The drone faded, grew up again. For a moment, he thought he heard his own voice call, "Auris, where are you?" from the other side of the blue flower thicket. Mr. Terokaw veered off in that direction, yelling something to Mr. Bliman and Kugus. Ilf backed farther away through the thicket, came out on the other side, climbed to his feet, and turned.

He stopped. For a stretch of twenty feet ahead of him, the forest floor was moving, shifting and churning with a slow, circular motion, turning lumps of deep brown mold over and over.

Mr. Terokaw came panting into Sam's sleeping place, redfaced, glaring about, the blue and silver gun in his hand. He shook his head to clear the resonance of the humming air from





his brain. He saw a huge, moss-covered boulder tilted at a slant away from him but no sign of llf.

Then something shook the branches of the thicket behind the boulder. "Auris!" llf's frightened voice called.

Mr. Terokaw ran around the boulder, leveling the gun. The droning in the air suddenly swelled to a roar. Two big gray, three-fingered hands came out from the boulder on either side of Mr. Terokaw and picked him up.

"Awk!" he gasped, then dropped the gun as the hands folded him, once, twice, and lifted him towards Sam's descending head. Sam opened his large mouth, closed it, swallowed. His neck and head drew back under his shell and he settled slowly into the sleeping pit again.

The greenweb's roar ebbed and rose continuously now, like a thousand harps being struck together in a bewildering, quickening beat. Human voices danced and. swirled through the din, crying, wailing, screeching, llf stood at the edge of the twenty-foot circle of churning earth outside the blue flower thicket, half stunned by it all. He heard Mr. Terokaw bellow to Mr. Bliman to go after Auris, and Mr. Bliman squalling to Hot to hurry. He heard his own voice nearby call Auris frantically and then Mr. Terokaw's triumphant yell: "This way! Here's the boy, Kugus!"

Uncle Kugus bounded out of some bushes thirty feet away, eyes staring, mouth stretched in a wide grin. He saw llf, shouted excitedly and ran towards him. llf watched, suddenly unable to move. Uncle Kugus took four long steps out over the shifting loam between them, sank ankle-deep, knee-deep. Then the brown earth leaped in cascades about him, and he went sliding straight down into it as if it were water, still grinning, and disappeared. In the distance, Mr. Terokaw roared, "This way!" and Mr. Bliman yelled to Hot to hurry up. A loud, slapping sound came from the direction of the stump of the Grandfather Slurp. It was followed by a great commotion in the bushes around there; but that only lasted a moment. Then, a few seconds later, the greenweb's drone rose and thinned to the wild shriek it made when it had caught something big and faded slowly away . . .

llf came walking shakily through the opening in the thickets to Sam's sleeping place. His head still seemed to hum inside





with the greenweb's drone but the Queen Grove was quiet again; no voices called anywhere. Sam was settled into his pit. Ilf saw something gleam on the ground near the front end of the pit. He went over and looked at it, then at the big, moss-grown dome of Sam's shell.

"Oh, Sam," he whispered, "I'm not sure we should have done it..."

Sam didn't stir. Ilf picked up Mr. Terokaw's blue and silver gun gingerly by the barrel and went off with it to look for Auris. He found her at the edge of the grove, watching Het's aircar on the other side of the road. The aircar was turned on its side and about a third of it was sunk in the ground. At work around and below it was the biggest member of the clean-up squad llf had ever seen in action.

They went up to the side of the road together and looked on while the aircar continued to shudder and turn and sink deeper into the earth, llf suddenly remembered the gun he was holding and threw it over on the ground next to the aircar. It was swallowed up instantly there. Tumbleweeds came rolling up to join them and clustered around the edge of the circle, waiting. With a final jerk, the aircar disappeared. The disturbed section of earth began to smooth over. The tumbleweeds moved out into it.

There was a soft whistling in the air, and from a Queen Tree at the edge of the grove a hundred and fifty feet away, a diamondwood seedling came lancing down., struck at a slant into the center of the circle where the aircar had vanished, stood trembling a moment, then straightened up. The tumbleweeds nearest it moved respectfully aside to give it room. The seedling shuddered and unfolded its first five-fingered cluster of silver-green leaves. Then it stood still.

Ilf looked over at Auris. "Auris," he said, "should we have done it?"

Auris was silent a moment.

"Nobody did anything," she said then. "They've just gone away again." She took llfs hand. "Let's go back to the house and wait for Riquol and Meldy to wake up."

The organism that was the diamondwood forest grew quiet again. The quiet spread back to its central mind unit in the Queen Grove, and the unit began to relax towards somnolence.





A crisis had been passedperhaps the last of the many it had foreseen when human beings first arrived on the world of Wrake.

The only defense against Man was Man. Understanding that, it had laid its plans. On a world now owned by Man, it adopted Man, brought him into its ecology, and its ecology into a new and again successful balance.

This had been a final flurry. A dangerous attack by dangerous humans. But the period of danger was nearly over, would soon be for good a thing of the past.

It had planned well, the central mind unit told itself drowsily. But now, since there was no further need to think today, it would stop thinking . . . Sam the mossback fell gratefully asleep.