



An excerpt from “Ice Hunt” by James Rollins, 2003,
Harper Collins

1:55 P.M.

ICE STATION GRENDL

Matt gaped, horrified, along with the others. A long curving hall stretched out from the main lab room. Lit by bare bulbs, the passage followed the outer wall of this level, circling and vanishing around the curve of this tier. Inset into the back wall every couple of feet were steel tanks standing on end, taller than Matt by a foot. Thick rubber hoses and twisted conduits ran along both floor and ceilings, connecting tank to tank. Though the fronts of the tanks were windowed in thick glass, the details inside remained murky because of the thick frost over the clear surface.

But a dozen of the closest tanks had the frost recently scraped from them.

The glow of the overhead bulbs shone plainly upon the sight inside. The interior of each tank was filled with solid ice, a perfect blue foreign clarity.

And like an insect trapped in amber, a shape was embedded in the heart of each tank. Naked. Human. Each face contorted in a rictus of agony. Palms pressed against the glass, fingers blue and clawing. Men. Women. Even children.

Matt stared down the long tunnel. Tank after tank. How many were there? He turned his back on the macabre sight. He saw the shocked looks on the others' faces.

Two members of the group, though, looked more embarrassed than horrified.

He walked back to the main room and faced them: Lieutenant Bratt and Amanda Reynolds. “What is all this?” He waved an arm down the hall.

Craig appeared at his side. Washburn and the civilian scientists gathered with him.

“It’s what the Russians are trying to cover up,” Amanda said. “A secret lab dating back to World War Two. Used for human experimentation.”

Matt studied the barred door. Greer and Pearlson stood guard there. For the moment, the Russians had given up on trying to get the door open. They were probably wary of the return of the grendels after chasing them back into the Crawl Space with gunfire. But that fear wouldn’t keep them out forever.

“What were the bastards trying to do here?” Washburn asked, looking the most shaken, her stoic demeanor shattered.

Amanda shook her head. “We don’t know We locked down the lab as soon as we discovered what was hidden here.” She pointed to a glass cabinet that contained a neat row of journals, covering two shelves. “The answers are probably there. But they’re all coded in some strange script. We couldn’t read them,”

Craig approached and cracked the door open. He leaned over, studying the bindings. “There are numbers here. Dates, it looks like. He ran a finger down the journals. “If I’m reading this right, from January 1933... to May 1945.” He pulled the last one out and flipped through it.

“Twelve years,” Bratt said. “It’s hard to believe this operation ran for so long without anyone knowing.”

Amanda answered, “Back then, communication up here was scant. Travel rare. It wouldn’t be hard to hide such a place.”

“Or lose it when you wanted to,” Matt added. “What the hell happened here?”

The biologist, Dr. Ogden, spoke from the hallway. He straightened from one tank. “I may have an idea.”

Everyone turned to him.

“What?” Bratt asked brusquely.

“The grendels,” he said to the lieutenant commander. “You saw what happened. The specimens came to life after being frozen for centuries.”

Amanda’s eyes widened. “That’s impossible.”

Bratt turned to her. “No, ma’am. Dr. Ogden is right. I saw it happen with my own eyes.

Dr. Ogden continued: “Such a miraculous resurrection is not unheard of in the natural world. Certain turtles

hibernate in frozen mud over an entire winter, then rise again with the spring thaw.”

“But frozen solid?” Amanda asked.

“Yes. Arctic wood frogs freeze as hard as stone during the winter. Their hearts don’t beat. When frozen, you can cut them in half, and they don’t bleed. All EEG activity ceases. In fact, there’s no cellular activity at all. For all intents and purposes, they’re dead. But come spring, they thaw, and within fifteen minutes, their hearts are beating, blood pumping, and they’re jumping around.”

Matt nodded when Amanda glanced at him. “It’s true. I’ve read about those frogs.”

“How can that be?” Amanda argued. “When a body freezes, ice expands in the cells and destroys them. Like frostbite. How do the frogs survive that?”

“The answer is quite simple,” Ogden said.

Amanda raised an eyebrow.

“Sugar.”

“What?”

“Glucose specifically. There’s a Canadian researcher, Dr. Ken Storey, who has been studying Arctic wood frogs for the past decade. What he’s discovered is that when ice starts forming on a frog’s rubbery skin, its body starts filling each cell with sugary glucose. Increasing the osmolality of the cell to the point that life-killing ice can’t form inside it.

“But you said the frogs do freeze?”

“Exactly, but it is only the water *outside* the cells that ices up. The glucose *inside* the cell acts as a cryoprotectant, a type of antifreeze, preserving the cell until thawed. Dr. Storey determined that this evolutionary process is governed by a set of twenty genes that convert glycogen to glucose. The trigger for what suddenly turns these specific genes on or off is still unknown, but a hormonal theory is most advocated, something released by the frog’s glandular skin. The odd thing, though, is that these twenty genes are found in *all* vertebrate species.”

Amanda took a deep breath. “Including the *Ambulocetus* ... the grendels.”

He nodded. “Remember I told you that I would classify this new species as *Ambulocetus natans arctos*. An Arctic-adapted subspecies of the original amphibious whale. The gigantism, the depigmentation ... are all common Arctic adaptations. So why not this one, too? If it made its home here—in a land ruled *not* by the sun, but by cycles of freezing and thawing—then its body might adapt to this rhythm, too.”

Bratt added. “Besides, we *saw* it happen with the monsters. We know they can do this.”

Ogden nodded and continued: “It’s a form of suspended animation. Can you imagine its potential uses? Even now university researchers are using the Arctic frogs as a model to attempt freezing human organs. This would be a boon to the world. Donated organs could be frozen and preserved until needed.”

Matt’s gaze had returned to the line of tanks. “What about these folk? Do you think that’s what’s going on here? Some type of sick organ bank? A massive storage facility for spare parts?”

Ogden turned to him. “Oh, no, I don’t think that at all.”

Matt faced him. “Then what?”

“I wager the Russians were attempting something grander here. Remember when I said the twenty genes that orchestrate the wood frog’s suspended animation are found in *all* vertebrate species. Well, that includes humans.”

Matt’s eyes widened.

“I believe that these people were guinea pigs in a suspended animation program. That the Russians were trying to instill the grendels’ ability to survive freezing into humans, seeking a means of practical suspended animation. They sought the Holy Grail of all sciences.” Ogden faced the questioning looks around him. “*Immortality*.”

Matt swung to face the contorted, pained figures in the ice. “Are you saying that these people are still alive?”

Before anyone could answer, a pounding sounded from the door, determined, stolid. Everyone went silent.

A hard voice called out to them. “Open the door immediately... if we have to cut our way through, you will suffer for our troubles.”

From the dead tone of the other’s voice, it was no idle threat. The wolf was at their door.